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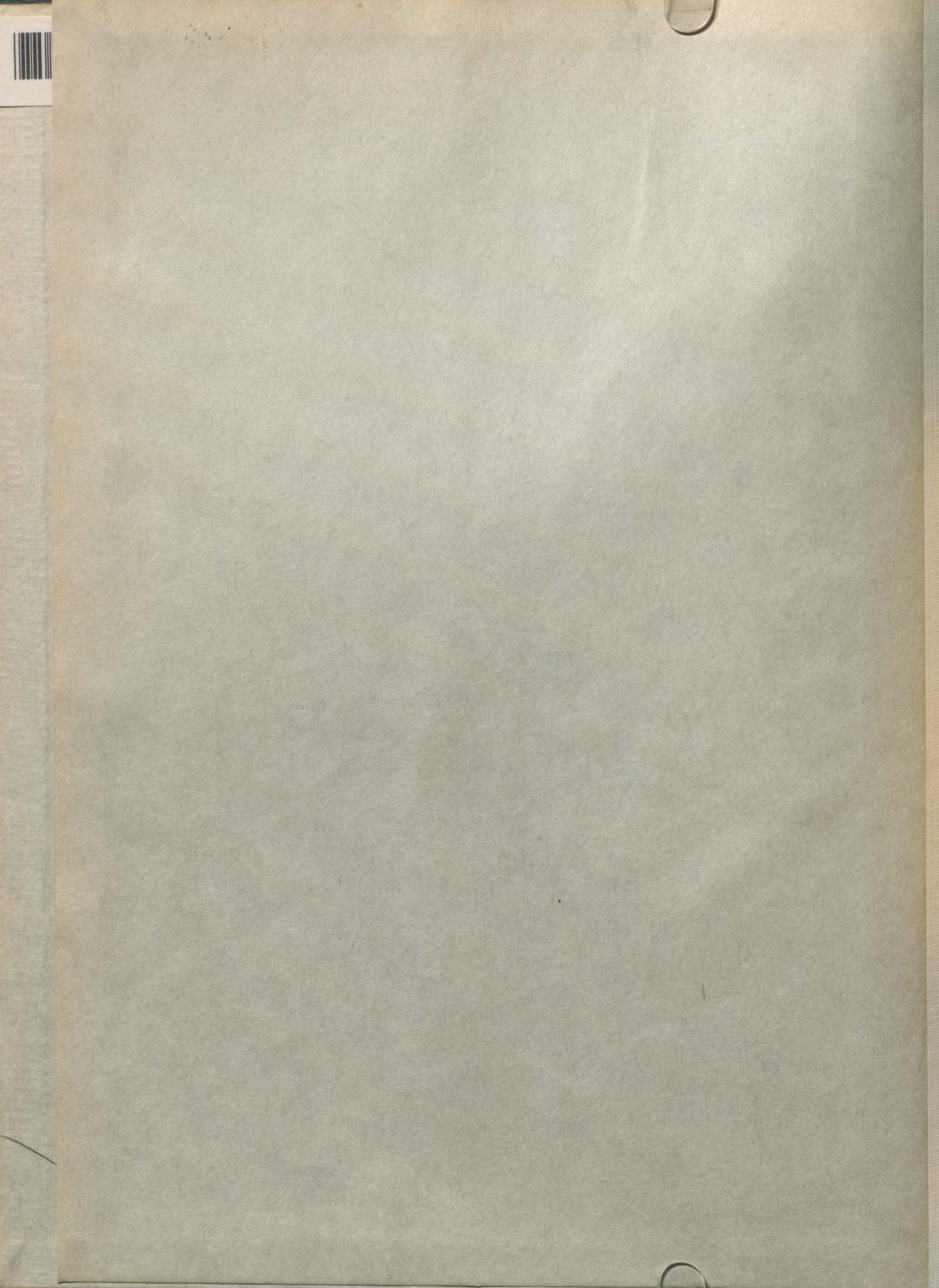
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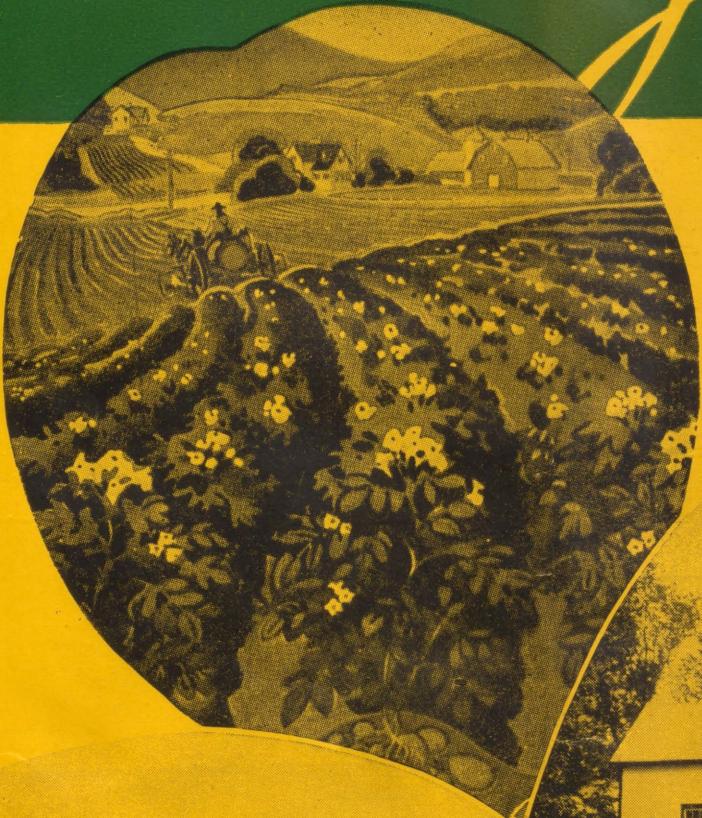


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The MACDONALD COLLEGE *Journal*

Vol. 2 • No. 1

SEPTEMBER 1941



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EDITORIAL COMMENT

Strengthening Our Stakes

Two years of war have extended the activities of Canadians over a wide front. Not only the enlistment of men in the armed forces on land, sea and in the air but—even more than this, the expansion of industry has changed the face of the nation to an incredible extent. In travelling about the country one comes upon vast camps and great factories in places where was wilderness two years ago. The next few months will show even more the results of the extensive planning for production that has been done.

But with the word of commendation we are glad to hear for this effort, comes also a warning. Public men of sound judgment are urging again that we must not neglect those normal activities that are essential to the social and moral health of the nation. The war must and will be won. (At last, there is a note of optimism on that score). But that may yet take time and after it is done, stupendous problems will present themselves. We will need reserves of morale to carry on now, and of social good sense to make the adjustments then required.

How may these resources be built up? The answer to this question comes in terms of increased understanding and strengthened loyalty — loyalty based on understanding. It is a question for homes and schools and churches to face together in this coming winter.

As we write, schools are opening again. Before long college courses will begin. Community programmes will be getting under way. Macdonald College looks forward to its part in this winter programme with expectation and pride. Her graduates will be taking their places in every walk of life. Through the special activities of the Rural Adult Education Service, the Journal and the Travelling Libraries she offers unprecedented opportunities to rural people for an enriched community life. Her courses are open as usual, despite a staff depleted by enlistments. She stands ready in every way possible to serve her community and will do so to the best of her ability.

THE DIPLOMA COURSE

The two-year course in practical agriculture has an increased appeal in these disturbed times when farm labour is scarce and young men are uncertain whether they may be called for military service. Beginning, as it does, after the fall work is pretty well over (November 3rd this year) and finishing before the spring opens, the diploma course gives a full five months of practical training of a very useful kind in a short space of time. Whatever are the other results of the war on agriculture, the man who has knowledge of sound farm management and of farm economics, added to increased skill in farm engineering and farm practice will have the advantage.

CAMP MACDONALD

An outstanding achievement referred to in our last issue but deserving of special comment was the week-end school for leaders of the Rural Adult Education Service held at Cedar Lodge last month. The plans laid and the projects discussed by 100 rural leaders of the Farm Radio Forums and the community schools give great promise for the coming season.

An increase in the number of the community schools from four to seven, adding Asbestos, Stanstead and Sawyerville, will avoid the congestion of last year and give local committees larger responsibility. The "International" Community School at Stanstead, which includes co-operation with people from Vermont, is a new and outstanding feature of the programme.

There are a number of organizations in the Province of Quebec which serve the three main interests with which the Journal is vitally concerned — the farm, the home, and the school. We are devoting this page to short descriptions of some of these, with photographs of their executive officers. The Journal is proud of its association with these public spirited bodies.

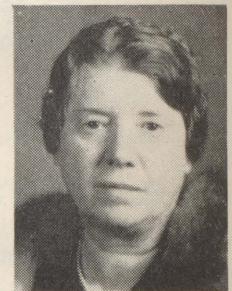
THE QUEBEC WOMEN'S INSTITUTES



Mrs. C. E. Dow
President

promote good citizenship. here referred to may be fittingly attained.

All Institutes organized are strictly non-partizan and non-sectarian in every phase of their work and no Institute should be operated in the interest of any party, sect or society, but for the equal good of all citizens.



Mrs. A. E. Abercrombie
Secretary

The first Women's Institute was organized in Quebec, thirty years ago. Since that time the organization has spread to twenty counties and now includes ninety branches, with a total membership of 1,961.

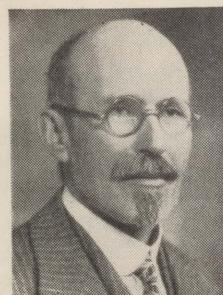
Using their motto "For Home and Country" the Quebec Women's Institutes are striving to carry out the following:—

- (a) To raise the standard of Homemaking.
- (b) To encourage the development of Agriculture.
- (c) To promote all educational measures, particularly rural education.
- (d) To promote the welfare of the child and the health of the public, co-operating with the health authorities and social agencies for this purpose.
- (e) To encourage the establishment of industries and the sale of Canadian made goods and the endeavour to promote the betterment of labour conditions in Canada.
- (f) To teach Canadian citizenship and to foster a true spirit of patriotism and the maintenance of Imperial relationship.
- (g) To assist in the colonization of New Canadians.
- (h) To disseminate such knowledge of Legislation as will tend to

- (i) To disseminate news or information regarding the work of the Women's Institute in order that the objects

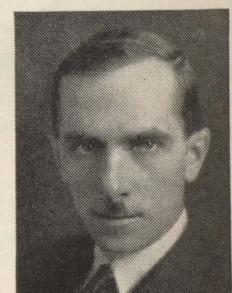
here referred to may be fittingly attained.

THE CO-OPERATIVE FEDEREE



J. F. Desmarais
President

patronage dividends, and half of the patronage dividends earned by non-member societies are offered to them at the end of each fiscal year as an inducement to join the association. The other half is transferred to reserves.



Henri C. Bois
Secretary

Substantial benefits to Quebec farmers have resulted from the activities of that unique amalgamation of co-operative societies known as the Co-Operative Fédérée. No individuals hold shares in this organization. Its members are co-operatives, and its activities are controlled by these local societies through their delegates. The directors, who are elected at the annual meeting, are all farmers and officers of an affiliated co-operative. At the present time there are over 250 local co-operatives associated with the central organization. 92 societies have been accepted into membership in the past 18 months.

The Co-Opérative Fédérée owns the Canadian Livestock Co-Operative which operates on the Montreal livestock exchange in competition with private firms; controls Dominion Elevators, Ltd., to take full advantage of grain prices through warehouse and elevator facilities, and operates 14 branches throughout the province to attain the volume of business necessary for economical purchasing of farm supplies. Profits so made are distributed to the member societies in the form of

patronage dividends, and half of the patronage dividends earned by non-member societies are offered to them at the end of each fiscal year as an inducement to join the association. The other half is transferred to reserves.

THE PROVINCIAL ASSOCIATION OF PROTESTANT SCHOOL BOARDS

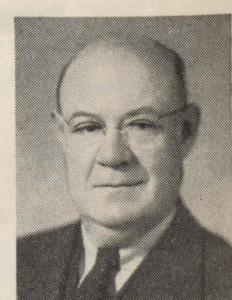


H. W. Jones
President

The first meeting leading towards the establishment of the Provincial Association of Protestant High Schools was held at Magog in midsummer 1929. Our Association is therefore upwards of twelve years old.

Advantages are several and varied. Current topics affecting the general interests of the country High Schools are always featured on the programme, and ample opportunity is offered the members for thorough discussion. Of almost equal importance is the general exchange of views on school problems off the convention floor and aside from those dealt with on the programme. Our next Meeting will be held at Macdonald College, on Thursday September 18th, and will comprise a morning and afternoon session, luncheon at noon and dinner in the evening, when special speakers are on the programme. Ladies are welcome at all sessions and especially so at the dinner.

The work of the Association now embraces not only the Provincial High Schools but the Intermediate and Elementary Schools as well. The Department of Protestant Education, Quebec, is always represented and members have an opportunity of personally discussing their problems with their representative. For our Meeting this year a special invitation is extended to any non-member boards who would like to attend and thereby become better acquainted with the scope of our activities.



A. R. Meldrum
Sec. Treasurer

Towards a True Democracy

(An address delivered at Camp Macdonald by F. R. Scott, professor of Civil Law, McGill University)

I AM very glad to be able to be with you on this afternoon and to see how excellently this meeting at Camp Macdonald is going. I am also glad to have a chance to discuss with you the opportunities facing the adult education movement. I believe that the movement has great opportunities, and particularly at this time. Some people are apt to feel that this kind of activity should slow down in time of war. I think the opposite is true. Of course, in war time certain essential things must be done first, but it remains true that the educating of ourselves in the ideals of democracy and the discovery of solutions to our present social problems is of the very essence of the things we are fighting for at the present time. In days like these, too, when people are deeply moved they are searching for new ideas and new ways to contribute to our country. In all these things the adult education movement can help.

The World We Live In

Now of course the biggest thing that confronts us today is the fact that we are at war and are trying to create an international world in which democratic ideas and institutions may survive. Looking back over the past twenty years of international politics we can see now that war came upon us because we had not properly utilized the peace. We had an opportunity after the last war to place international politics on a new basis. We made an attempt to do that in the League of Nations. I still think it was a pretty good attempt. I think we made more progress toward world government at that time than men have ever made before, and the experience has not been lost. Unfortunately we did not succeed in the attempt. Partly that was because our governments did not hold strictly enough to the principles in the League Covenant. But why did they not do that? The deeper answer lies with us, the people of every country. We did not pay enough attention to international questions, and we allowed selfish interests in our own country to obstruct government policy of a progressive sort. So now we are paying the bill.

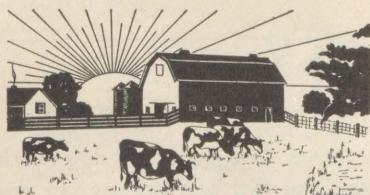
Surely we realize now that nothing touches the ordinary man and woman more closely than international affairs. In time of peace such questions seem remote and we forget about them or leave them to others. Then suddenly the peaceful world collapses, and it is the ordinary people on whom the blow chiefly falls. International affairs are deeply and personally the concern of every one of us. This will be more and more true as science develops new methods of communication and destruction. For this reason I think that the adult education movement should lay special emphasis on its discussion of public affairs and international affairs. If it provides a means whereby we can all express our interest in and learn more about Canada's place in the world it will be performing a great national service.

But there is another reason why the brave new world of the 1920's broke down, and that was because our economic system broke down. We can all remember the great depression of 1929 and the following years. Those trying times certainly caused a lot of adult education to come on very quickly. We all learned to talk and think about the "economic system". We even learned that we lived under a "capitalist" system. We discovered there were weaknesses in the system which could suddenly throw more than a million Canadians on to relief, where they had scarcely enough to eat though farmers had more produce than they could sell. We began to look more deeply into our social system, and learned that wealth was not fairly distributed and that monopoly was wide-spread. These things taught us that a nation cannot afford to leave its economic system to evolve by itself. It may evolve in the wrong direction. Only the people of the country should decide, through their democratic institutions, what kind of economic system they want.

Canada's Own Problems

You will remember too that we began to make plans in Canada for solving some of these problems and developing a more secure and more just economic system. We had the Report of the Royal Commission on Price Spreads in 1935, which proposed a number of important changes in existing laws. Unfortunately, with the change of government, and with the disastrous decisions of the Privy Council on Mr. Bennett's "new deal" laws, none of this effort came to anything. Canada in fact never got her new deal in the 'thirties. Most of the other democracies, particularly countries like the United States, New Zealand and Sweden, pushed far ahead along progressive and democratic lines, but progress in Canada was slow and hesitant. However, Mr. King appointed a second Royal Commission to investigate the relations between the dominion and the provinces, and this issued its report — known as the Sirois Report — last year. The report is a great contribution to our understanding of ourselves and contains many excellent recommendations for the future. But you know what happened to it. The war had come upon us and some short-sighted politicians were able to prevent any improvements being made. Only one important proposal was brought into effect, this was the long overdue unemployment insurance scheme.

So we see that Canada has gone through this period of trial with surprisingly little change. The best minds of the country have reported that many changes are necessary yet the political situation has prevented their adoption. We have seen however many signs of an awakening among the people. We have seen a great development in the adult education movement itself. This shows that the



AGRICULTURE

Articles on problems of the farm

Why Not Establish More Sheep Flocks?

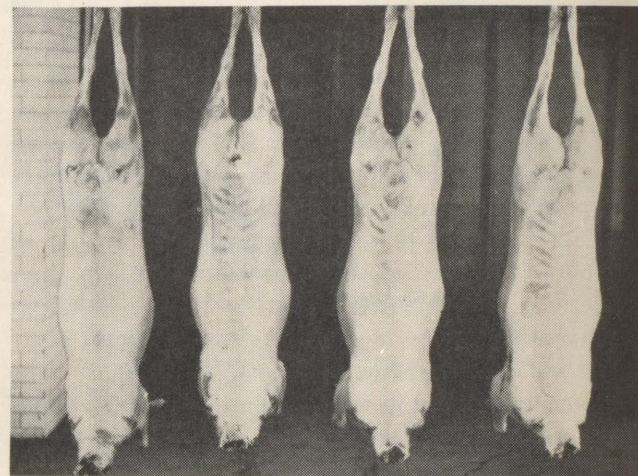
by L. H. Hamilton

FARM flock expansion is warranted by current wool and lamb prices and expanding consumption. This is the opinion expressed by many who have been following production and marketing trends, and it has come to the attention of many farmers who are trying to maintain their income on less labour, if one can judge by the number of enquiries made. There are also a number of other reasons why Quebec farmers should be especially interested. We have during the past few years made it possible for farmers to raise sheep successfully by putting teeth into our dog law and by discovering a simple and relatively inexpensive method of controlling parasites.

For years this industry has suffered greatly by the deprivations of useless dogs. It is difficult to find any group of sheep men in the Province who have not at one time or another suffered severe loss because of the cunning canine. Quite apart from the actual killing, the harm done the remainder of the flock has been so discouraging that many gave up, while others refused to consider sheep as a possibility. Under the present law a farmer receives full compensation for his loss and the dog is subject to a tax. This will no doubt reduce the number of useless curs and encourage those interested in sheep to go ahead.

Because of the type of pasture land available in this Province as well as the cost and difficulty of fencing, parasites became a real problem in many districts. Fortunately for sheep men, recent discoveries have made it possible to treat sheep with Phenothiazine tablets before they are put on pasture, and, when this is properly done one may be reasonably sure of control of parasite infestation. In many instances a further treatment is necessary but the first set-back is avoided and the lambs come along much better than was formerly true.

Because of war conditions, resulting in an extraordinary expansion of the hog industry and the possible difficulty of finding sufficient coarse grains to produce as much as we would like, the market for lamb is likely to expand. In fact, lamb consumption will expand of its own accord if we have access to a regular supply of a quality product at a reasonable price. Lamb production fits into most farm programmes. Known as the Golden Hoof, sheep return more fertility to the soil than other domestic animals. They eat weeds which cattle ignore and as pasture renovators they have no equal. The ancient superstition that cattle



Quality lamb brings a good price. Left to right: purebred Shropshire, purebred Southdown, two crossbreds. They were born on the grass and butchered early in October. Note good legs and wide, well-muscled backs.

will not graze on grass occupied by sheep has been effectively disproven and dispelled.

Who Should Keep Sheep?

Any farmer who has pasture and hay available can profitably keep a flock of sheep. It should be borne in mind, however, that we have already a sufficient number of so-called sheep men who are still trying to produce lamb without feed or attention. Sheep need care, but their needs are few. Shelter is essential, but it need not be expensive. Straw is a poor substitute for feed. There is nothing very difficult about proper management, but it is like growing crops when your land has been spring plowed and seeded late: you get a poor crop. With sheep, if you *don't* attend to them when you should, you get poor returns.

Buy Good Grade Sheep

The best time of year to start a flock is now. Lambs are being weaned and breeding flocks culled. Surplus stock will be sold at the lowest price for the year. There will be an opportunity to select. Plan to buy good grade stock. Don't try to teach the purebred breeder new tricks all at one stroke. In selecting your individuals be sure they are uniform, healthy and sound.

Sheep are usually healthy, when they are in a normal thrifty condition. Very fat or very thin ewes are not usually desirable. Those which are fat have probably had an idle

year. Those which are very thin are probably parasitic. Parasitic sheep usually have dirty rear ends and are lifeless in appearance. The wool is often dry and harsh.

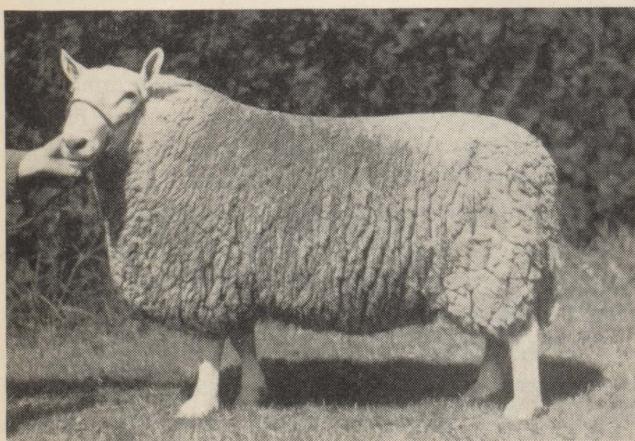
Sound sheep are those with no teeth missing and with sound udders. This is easy to observe by parting the lips and handling the udder. Udder troubles are usually the result of poor management. Garget at lambing time or improper weaning will often leave the udder with hard lumps which can easily be felt. These lumps usually mean no milk at lambing time.

Select a Good Ram

In selecting a ram it should be borne in mind that a sire cannot transmit to his progeny characteristics which have not been bred into him by his ancestry. The time to put a price on your market lambs is when you buy the ram. Horsemen pay high stud fees for a good sire. Cattlemen are adopting artificial insemination in order to make wider use of good bulls. Our best sheepmen are following both these practices. It is necessary even in a small grade flock to buy a good sire. A purebred has a known ancestry. Individuality plus a pedigree of ancestral performance is a double guarantee of a quality product. Select a low-set, thick-bodied type with a uniform fleece. On a grade flock the breed is not so important. For instance at Macdonald College we have had excellent results in crossing the Cheviot ram on Leicester, Shropshire, Southdown and Oxford ewes. In fact it is our belief that a cross, providing it is not too extreme, gives the best results. We have had less mortality at birth, a faster rate of gain and a more vigorous type of lamb. The carcasses and wool have also been excellent.

Where to Buy

Buy off the farm when at all possible. Avoid stock market sheep. This means starting now before all the surplus stock has been shipped to market. The supply is limited in eastern Canada. The demand this fall promises to be good. The outlook for sheep at present is encouraging. If you intend to establish a flock avoid the pitfalls of others; buy good stock, get them early. This is the first step in making profits.



A good specimen of the Cheviot breed. An imported ram used at Macdonald College.



FARMERS BORROW ON Fair TERMS

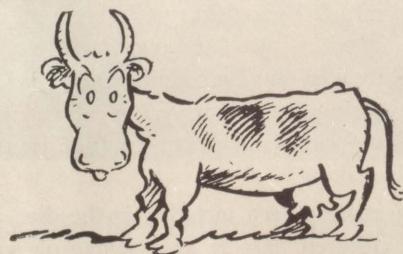
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Drink Your Vitamins!

by L. F. Ounsworth

Everyone is familiar with tomato juice nowadays. It is advertised in all the newspapers and magazines. It is a familiar standby as an appetizer and is prized by doctors for its health-giving properties. Yet fourteen years ago no one had heard of it. In 1928 people were just beginning to drink canned grapefruit juice. Grape juice was of course well known, but no one had tasted or thought of our familiar canned apple, raspberry, rhubarb or other juices which are being packed in increasingly large amounts today.

The comparatively new business of squeezing juice from fruits and vegetables is thriving. Twenty-seven different fruits — apple, apricot, blackberry, blueberry, cherry, cranberry, currant, grape, grapefruit, guava, lemon, lime, loganberry, nectarine, orange, papaya, passion fruit, pear, peach, pineapple, plum, pomegranate, prune, raspberry, strawberry, tangerine and youngberry and thirteen different vegetables — asparagus, beet, carrot, celery, garlic, lettuce, onion, parsley, rhubarb, sauerkraut, spinach, tomato, turnip are used today for making juice. In 1939 over 12 million cases of tomato juice were sold, and all our readers know of the increasing size of the apple juice industry.

In the case of fruit juices it is the taste that prompts the customer to buy; in most cases the urge for a health-drink is secondary. On the other hand few people will buy turnip juice for its taste; those who use it do so for its vitamin content. Still, some vegetable juices, rhubarb for example, are good *and good for you*. One use of fruit juices is in the making of syrups for soda fountains and soft drinks, and for flavouring ice cream. Juices of many kinds are used in making wines and preserved fruit juices are often used in jelly-making.

Fruit juices have been included in the diet, particularly of growing children, largely as a source of water-soluble vitamins (B and C) and care must be taken not to destroy these vitamins during processing. The healthful fruit acids and mineral salts are more stable than the vitamins and are not usually affected.

How It Is Done

There is more involved in making good juice than just squeezing some fruit and bottling the result. To start with, the fruit must be fresh, ripe, and of the proper variety. Mouldy, decayed or split fruit will not make good juice. Washing is necessary to get rid of dirt and the spores of mould, yeasts and other organisms which might be on the outside.

Soft fruits are crushed. Vegetables and some of the firmer fruits have to be grated to get the juice out. Berries and other soft fruits are prepared for crushing by heating;

this makes it easier to extract all the juice. The juice is squeezed out in a press, collected and strained to get rid of the large pieces of pulp which it contains. It is possible to remove all suspended particles so that the juice is entirely clear, but a clear juice may lack the colour, flavour and nutritive value of the cloudy product. Clear juices are less in demand at present than cloudy ones.

Juice will not keep long at ordinary temperatures unless some process of preserving is used. All juices deteriorate in colour, quality and vitamin content on exposure to air during processing, and the juice should be exposed to a high vacuum as soon as possible after extraction to get rid of the air before it becomes fixed in the juice. Contact with certain metals, such as zinc, lead, solder, iron, must be prevented. Methods of keeping the juice, once it is canned, include pasteurization, pressure and gas treatment, freezing and the use of chemicals.

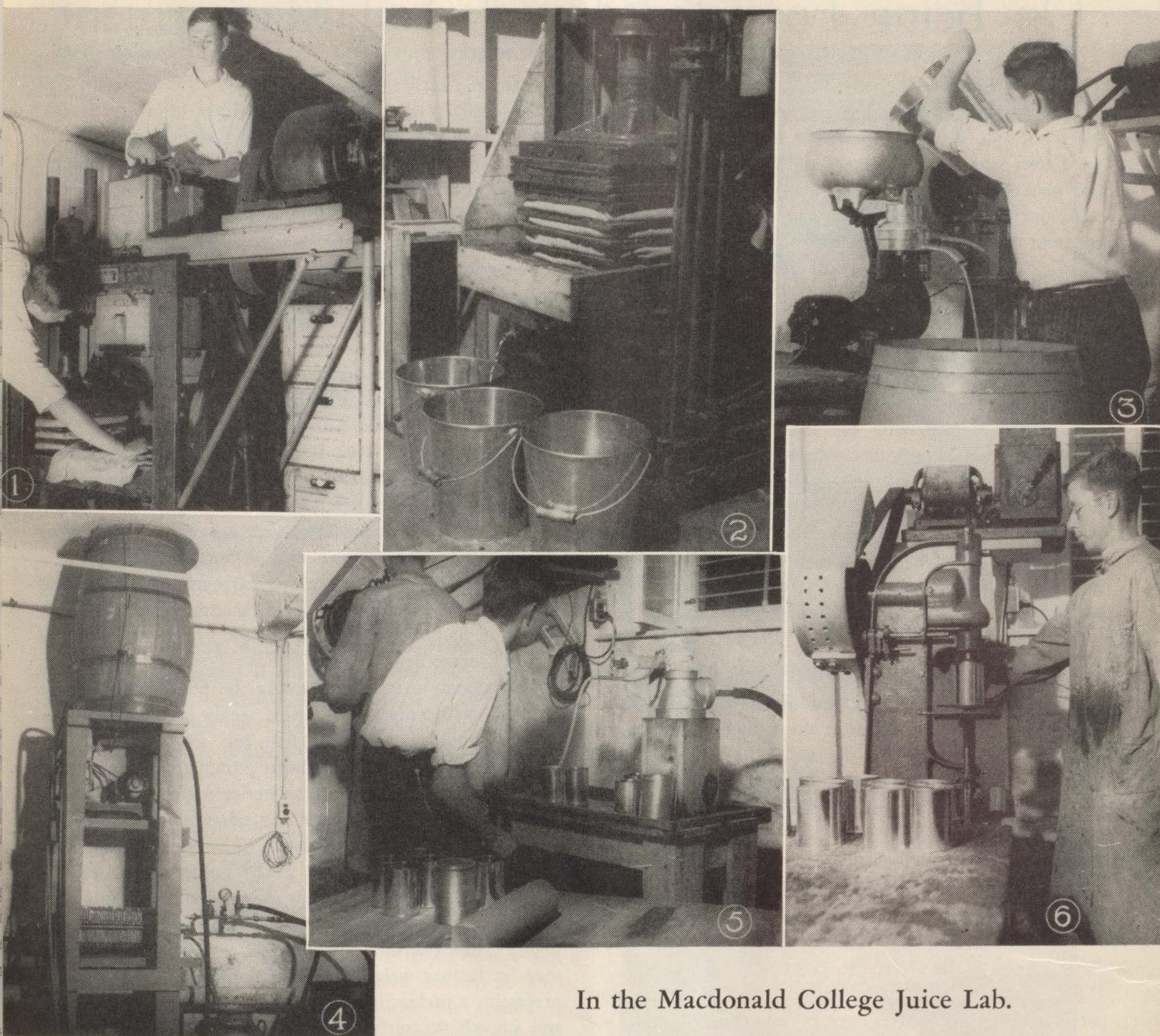
Juice, Like Milk Is Pasteurized

Pasteurization consists of heating the juice hot enough to kill all the organisms in the juice which might cause fermentation. The temperature used must be just right. If the juice is heated too much it tastes cooked; if it is not heated enough, all the organisms are not killed. Every fruit and vegetable juice requires its own particular temperature. Two methods of pasteurization are used. *Holding* pasteurization consists of heating the canned or bottled juice to a certain temperature and holding it there for a given length of time. *Flash* pasteurization means heating the juice quickly to a certain temperature, after which it is run into cans which are at once headed and cooled. The heat of the juice sterilizes the sides and bottom of the can and the lid is sterilized by turning the can upside down.

Pressure and gas for preserving juice is not as satisfactory as some other methods. Carbon dioxide, nitrogen and other inert gases have been used. Some chemicals such as benzoate of soda have been found effective, but they leave a taste which some people find objectional. The amount which can be used is regulated by law. Filtering juice through special filters which allow the juice to pass but which strain out the bacteria will keep it from spoiling, but this gives a juice which is thin and unappetizing.

Properly frozen juice can be kept indefinitely, but this type of preservation is obviously not practical when the juice is to be sold over the counter.

The whole object of making fruit or vegetable juice is to get a product that appeals to the taste and which is of value as a food. In general, a juice which tastes good is good for you. An unappetizing, flat juice has lost much of its food value.



In the Macdonald College Juice Lab.

1. In this machine firm material such as rhubarb, apples, etc. is shredded between rapidly revolving toothed rollers. The pulp and juice are caught on special press cloths which are folded around the pulp to form a flat bag.
2. Several of these bags, with a slatted frame placed between each, are piled under a hydraulic press which squeezes out all the juice. The remaining pulp may be used, when apples are being processed, in making commercial pectin.
3. The juice is partly clarified in a commercial centrifuge, which operates on the same principle as a cream separator.
4. The second clarification, or finishing, is done by pumping the juice through a filter press made up of metal plates between each of which is placed a square of special canvas on which a deposit of "filter-aid" has been built up. In the case of rhubarb juice 15% sugar is added at this point, after which the juice is pumped into a container above the press.
5. The juice now flows by gravity to a flash pasteurizer where it is heated instantly to a temperature of 165° to 185° F. depending on the kind of juice. The hot juice is run into cans, which are sterilized by the heat of the juice.
6. The cans are closed immediately after being filled, and inverted to sterilize the lid. They are then partially cooled in a tank of water, labelled and packed.

On Being Forehanded with Soil Management

by L. C. Raymond

BEFORE this message gets into print it will be too late to consider all of the suggestions it contains, for the current season. It may be profitable, however, to look backward over what has been done and make any adjustments that may seem advisable in the next season's plan.

As one goes about the country year after year it is quite apparent that crops generally, with some notable exceptions, are put in without adequate soil preparation and without due consideration for weed control.

If there is such a thing as an off-period in running a farm when the work does not press quite so much, it should occur in a season like the present one when early seeding combined with relatively dry, warm weather has advanced the completion of haying and harvesting. Such a season provides a great opportunity, when these major operations are over, to get soil in good shape for seeding. In these times when labor is scarce and we need the greatest possible returns, it is important to make the very best use of our time and facilities. Two sets of conditions suggest themselves — preparation of the soil for fall and for spring seeding and it will be appropriate to consider them separately.

Soil Preparation for Fall Seeding

In this province relatively few crops are planted in the fall, due in large part to our severe winters. The two that are most likely to be, are fall rye, either for pasture or grain, and pasture mixtures. The former crop is attracting considerable attention due both to its many uses and also on account of its value in distributing the crop work. The practice of seeding permanent pastures in the fall has much to be said for it particularly in the drier sections, since with proper previous preparation the establishment is likely to be much more easily accomplished in the cooler and more moist period of the year.

Fall plantings will rarely be successful on hastily prepared land. Two objectives must be kept clearly in mind — to develop a fine, firm and moist seed bed and to destroy

weeds. The earliest possible plowing is the first step. This means that a fall sown crop must either follow some crop that is removed early or a complete summer fallow. The latter should not be a regular practice here in the east but may be justified where a particularly bad weed situation obtains. Usually it means following a hay sod or a pasture field. Such a field should be plowed thoroughly, using a skim-coulter where necessary to insure complete covering of the sod. Follow this with a good disking to break up the soil on the upturned furrows, thus providing a loose soil cover that will smother the sod and allow for the maximum absorption of the summer rainfall. Care should be taken to avoid turning up any of the sod in the early stages — the disk should first be run with the furrows. Subsequent work on this land should be sufficient to prevent the establishment of any vegetation. As soon as any grass or weeds get started another cultivation should be given. When the sod has been destroyed, deeper cultivation may be practiced either with a disk or tooth cultivator. It is always well to use the smoothing harrows over such a field to level it and break up any lumps that may have appeared. Three or four such treatments should effectively take care of the average field.

Immediately preceding planting the field should not be worked too deeply since a firm seedbed is desired. The surface should however be fine and well pulverized to insure good covering and uniform germination. The planker is an excellent implement to pulverize surface soil that has become lumpy. This implement is relatively cheap and can be largely home made. It consists of a series (usually four or five) of heavy planks 2" x 11" fashioned to lap over one another so as to present the sharp edge of each plank as a breaking and smoothing medium on the bottom of the planker. Elm planks are best for the purpose. The machine may be further weighted down if required. A roller, or preferably a packer, is a very useful machine to firm the soil and smooth the surface just previous to planting.

Any pasture mixture should be seeded by August 15th, if it is to have a good chance to become established before cold weather. Fall rye, if intended solely for pasture, and particularly fall pasture, may be planted by August 1st, but if it is to be used as a grain crop only, the seed should be put in toward the latter part of August and not later than September 1st.

Fall Soil Work for Spring Planted Crops

Fields that are to be prepared for planting the following spring will have either been in sod, following hay or pasture, a grain crop, or a hoed crop of some sort. It is with the first two of these that the most effective previous work can be done since the crops are removed relatively early. Provision must of course be made for pasture and the use of aftermath is general and commendable but where a sod is heavily infested with couch grass or other bad



A good job of Fall plowing.

weeds, it is a short-sighted policy to hold such a field for rather indifferent pasture, when by plowing early and surface working it might be greatly benefited for subsequent crops. Plans should therefore be made to break as much of such sod fields as possible and keep them cultivated through the late summer and fall. Where the soil is heavy a second plowing in late fall is advisable to take advantage of the frost action.

Grain fields that are not seeded down, provide another place where good work can be accomplished during the fall. Weeds are assuming rather alarming proportions on many farms. Foxtail and ragweed are very prevalent following grain, providing an enormous seeding if steps are not taken to destroy them. Where the soil is not too heavy this can often best be accomplished by a thorough disking immediately after the grain is removed. This will destroy the existing plants and any mature seed will be given an opportunity to germinate and will in turn be destroyed in the fall plowing. Quebec fields have been relatively free of that very bad weed — sow-thistle — but it has been noted over quite a wide area this year. No effort should be spared to keep it out and such treatment as just mentioned affords an effective means.

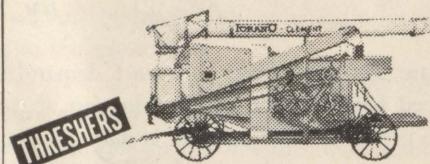
Land that has been in hoed crops does not offer too much chance for extensive fall work. The corn field, however, should be given a careful plowing in view of the prevalence of the corn borer. One of the most important remedial measures is the burying of all stubble and pieces of stalk.

Drainage

Whether land is to be fall or spring seeded, definite provision should be made for the best possible drainage. For the crop seeded in the fall this is necessary to prevent the collection of ice during winter and spring which will almost invariably kill out any vegetation beneath it. This applies mainly to surface drainage since the ground is usually still frozen when the ice forms. Depressions should be avoided as far as possible and surface ditches provided to drain out the low spots.

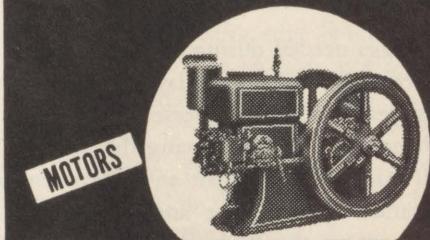
Where the land is being prepared for planting the following spring, drainage is equally important but in a somewhat different way. A poorly drained field is very slow to dry out in the spring and will often unduly delay planting. Extreme cases and special circumstances may justify underdrainage but in most instances surface drainage must suffice. The main ditches should be kept clear and any accumulation on the banks must be prevented so that the water may readily get into the ditch and away. The plowing should be planned with drainage in mind and the dead-furrows opened at the ends to give access to the ditches. All such water courses should be made with widely sloping sides to allow the farm implements to pass through them readily.

FORANO



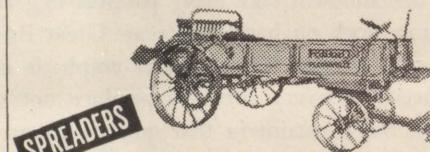
Forano Threshers, 4 models, 6 sizes, are well made, fully proven and guaranteed. The smallest unit has a capacity of 35 to 60 bushels per hour and the largest, 120 to 225.

Farm



The Stationary Gasoline Engine is gradually regaining the confidence of the farmers because time has proved that slow speed stationary engines last a lifetime without trouble. The Forano is an old timer still on the job.

Specialties



The Forano light weight and light draft Manure Spreader, with a capacity of 40 to 45 bushels, has a wide reputation for its performance with two medium weight horses. Maintenance cost is very low with a Forano.

are Reliable



Forano Root Cutter can be driven by hand or motor. It is roller bearing mounted, rendering it easy to operate.

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THE PLESSISVILLE FOUNDRY

PLESSISVILLE, P.Q., CANADA

MAKERS OF FORANO PRODUCTS SINCE 1873

EGGS for BRITAIN

More Eggs Through Efficient Production

by W. A. Maw

NEVER before has there been a distinct demand or a greater need for increased egg production at profitable prices to the producer. The demand is due to a definite need to produce every possible egg for export to Great Britain. Since the demand comes too late to allow for increased pullet flocks for fall production, the great need is to produce more efficiently with the present stock. Greater use must be made of the yearling hens on hand.

The supply of eggs needed during the coming year will necessitate an increase of two eggs per layer for each month during the laying year. Such an increase may be possible with flocks which have not been receiving the best of care, but with the well-managed flock such an increase in number of eggs demands extreme care and efficiency in all phases of management of the flock. Avoid waste of feed to keep costs at a minimum, and keep the layers in a thrifty active condition by close observation of their needs. Maintain those needs through proper feeds, comfort and sanitation.

The present demand will take every possible egg from the available laying stock on hand this year. Great Britain wants Grade A quality eggs. Thus greater emphasis must be put on the need for every effort to produce not only high quality eggs, but to maintain that quality for arrival on the British market.

Our aim should be to hold all available laying stock this fall. Where housing accommodation is available, fill to capacity. Do not, however, overcrowd the laying stock.

The following quotations from the pamphlet "Eggs for Britain" emphasize further the need for more eggs per hen with lower feed costs.

Keep Best Yearling Hens

"Many poultrymen make a practice of marketing all their yearling hens by the time the pullets start to lay.

"It has been demonstrated many times that good yearling hens can be brought back to profitable production after a short rest following their moult. The present objective is to have a full hen house on every farm. By retaining all the good yearling hens this objective will be more readily attained. With proper care and proper feed, healthy, vigorous yearling hens can be profitable producers.

"Poultrymen are advised to cull their yearling hens with the idea of retaining birds capable of profitable production through the fall and winter months. Only those

birds which are obviously done as layers should be culled out and marketed.

"Arrangements should be made to house yearlings and pullets separately. Older birds always pick on younger birds and egg production suffers. Where it is not possible to house them separately it may be possible to sell good yearlings to neighbors who have extra housing space."

Farm Flocks Most Important

"The bulk of egg production in Canada comes from the flocks on the average farm. It is in the management of these flocks that the greatest improvement in efficiency can take place. No matter what the size of the flock, it is not too small to be included in the program for more efficient production.

"On many farms the hens are not given the feed and attention which result in sustained production. Yet, in most cases they have the inherited capacity to lay heavily. Give them the extra care and feed, particularly a good laying mash, and they will respond by producing the extra eggs which are the potential source for the volume of eggs required by Great Britain.

"The average egg production per hen in Canada is estimated at 111 eggs per year. Many well-managed farm flocks average much higher than that; some produce over 200 eggs per hen in a year. But, with the average at 111 eggs, there are a lot of flocks producing less than that number of eggs. Increased production in these flocks will raise the average and give the extra eggs needed in the war effort.

"An important point in feeding is to provide ample hopper space. Every hen should be able to eat mash when she is hungry. Provide at least 24 feet of double sided hoppers for every 100 hens.

"Efficient management is the key to profitable and patriotic production."

What greater desire could the poultryman wish for than this opportunity to produce to the utmost essential food, such as eggs, for the British peoples at the present time? The great need for such food is sufficient to spur on everyone keeping laying stock to urge the hens and pullets to the maximum in egg production by good management.

We must supply the eggs needed. The farm flocks must be maintained at full capacity, as they are the major source of the necessary production of eggs.

Sharpening Steel Plow Shares

by W. Kalbfleisch

WITH the greater use of tractor plows in Eastern Canada there is more need for the forging of plow shares. Walking plows used cast iron shares, but tractor plows now use steel plow shares to stand the heavy shocks on these plows. Cast iron shares are cheaper and they usually wear longer than steel shares, but the cast iron points always break when a tractor plow hits a heavy stone.

Soft center steel shares can easily be sharpened by heating a blacksmiths forge, but great care must be exercised when shaping them in order that they will operate properly when again placed on the plow. The heating and shaping of a plow share is not an easy job, but it can be done by anyone who is a good hand at forge work.

Heating and Working the Plow Share

A cherry red heat should be used and a deep forge fire maintained when the share is being heated. In the first heat, the point, or nose, of the share is driven back (upset) so there will be sufficient material to draw the point down and give it $\frac{3}{16}$ to $\frac{5}{16}$ of an inch suction. (Suction is the slight turn-down of a plow point). When heating the edge of the share, place it face down in the forge with the cutting edge in the fire. The edge of the blade should be heated in sections about $\frac{1}{2}$ inch deep and about 4 inches long. It is particularly important that the blade of the share

should not be heated clear across because this would warp the back of the blade and make it impossible to attach the share to the plow.

To draw out the edge, place it on the anvil with the lower face down, and the edge thinned out. Each time the share is returned to the fire the coke should be banked up to keep the flame close to the cutting edge. Hammer the share when it is a cherry red and do not heat the share to a cream or it will throw sparks and burn. After the blade of the share has been finished it should be checked for throat clearance. If you have a new share for a guide you will notice that the cutting edge is not usually straight but has a rise of about $\frac{1}{8}$ of an inch at a section about 4 to 6 inches from the point. This clearance makes the edge cut easier.

Vertical Suction, Land Suction and Wing Bearing

Before a steel plow share is hardened it must be checked to see that it has the proper shape. The point of all plow shares is bent down (vertical suction) so the plow will penetrate the ground when starting a furrow. The amount of suction varies from $\frac{3}{16}$ of an inch to $\frac{5}{16}$ of an inch according to the hardness of the soil to be plowed. All plow shares have land suction so they hold a full, furrow width. The land suction given is about the same as the vertical suction.

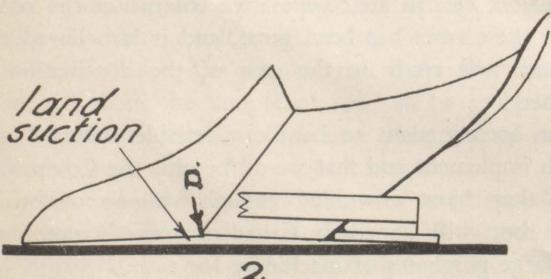
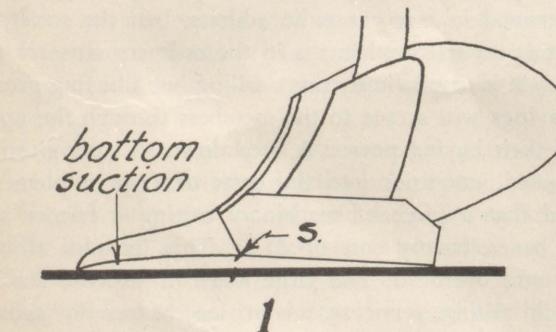
Wing bearing is only used on a walking plow share and is necessary to give the plow stability so the handles do not sway from side to side when the plow is working. On a 10 inch plow the flat section at the wing corner is about $1\frac{1}{4}$ inches wide and about 3 inches long. This flat surface is triangular in shape. (Wing bearing is not used on plows with wheels). The throat clearance of $\frac{1}{8}$ of an inch should also be checked before hardening the share.

Hardening Soft Center Steel Shares

An emery wheel or file can be used to put a fine edge on the share before it is hardened.

To harden the plow share, it is heated along its entire length (and about $\frac{1}{2}$ " deep) to a dull cherry red. The dull cherry red can only be seen in a darkened or shaded place when the share is removed from the fire. When dipping the share into cold water for hardening, grab it with the tongs at the back and dip the entire cutting edge into the water at the same time. In other words hold the share so the cutting edge is parallel to the surface of the water just before it is dipped. On the first dip let the share into the water about half way for a second and withdraw it. On the next dip, put $\frac{3}{4}$ of the share down. On the third dip, submerge the share until it cools. Experience will teach you the proper hardening of a share. Higher heat and longer dips in the water makes the share harder.

(Concluded on page 28)



1. PLOW BOTTOM SUCTION. The tip of the plow share points downward. This is called bottom suction and is necessary for penetration. At "S" the gap is about $\frac{5}{16}$ of an inch.

2. PLOW BOTTOM LAND SUCTION. The end of the plow share points toward the unplowed land. Land suction assures a full width of cut. The space at "D" is about $\frac{1}{4}$ of an inch.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

MARKET COMMENTS

The first two years of the War witnessed farm products lagging behind the prices of all goods. This was due to the surpluses of some farm products on hand at the outbreak of the War and still available. The present season of light crops generally and the increased overseas requirements are together relieving the pressure of surpluses.

The prices of some farm products have run above the general level during the past two years. Live stock, butter, cheese, poultry, and poultry products are classed together in the animal products group. This group together with the field products make up the index of Canadian Farm Products. It is interesting to compare the two divisions of farm products during the past two years.

Index Numbers

	Aug. 1939	Aug. 1940	June 1941
All goods	72.4	82.7	89.6
Farm Products	58.4	62.7	72.1
Field Products	48.2	50.4	58.7
Animal Products	75.6	83.3	94.5

This record shows the type of farm products that are low, the advantage of the animal products group and the trend. Future requirements overseas indicate that a greater volume of animal products will be taken at a price that will be no lower than that now prevailing and may be somewhat higher.

Trend of Prices

	Aug. 1940	July 1941	Aug. 1941
	\$	\$	\$
LIVE STOCK:			
Steers, good, per cwt.....	8.40	8.83	9.00
Cows, good, per cwt.....	5.75	6.60	6.75
Cows, common, per cwt.....	4.25	4.90	5.05
Canners and Cutters, per cwt.....	3.50	3.98	4.20
Veal, good and choice, per cwt.....	11.15	10.05	11.30
Veal, common, per cwt.....	9.00	7.30	8.95
Lambs, good, per cwt.....	11.75	12.33	11.45
Lambs, common, per cwt.....	9.75	10.33	9.45
Bacon hogs, dressed B.1, per cwt.....	11.80	15.00	15.00
ANIMAL PRODUCTS:			
Butter, per lb.....	0.23	0.35	0.36
Cheese, per lb.....	0.18	0.18	0.18
Eggs, Grade A, large, per dozen.....	—	0.35	—
Chickens, live 5 lb. plus per lb.....	—	0.21	—
Chickens, dressed, milk fed, A, per lb.....	—	0.33	—
FRUITS AND VEGETABLES:			
Apples, yellow transparent, No. 1, per bushel.....	1.75-1.85	1.50-1.75	
Potatoes, No. 1, Quebec, per 75 lb. bag.....	1.10-1.25	1.00-1.25	
FEED:			
Bran, per ton.....	24.00	25.25	25.25
Oil meal, per ton.....(38%)	28.00	(39%)39.00	(39%)39.00

Co-operative Implements

Here is how the farmers of the three prairie provinces are going about reducing the cost to themselves of the farm implements they buy.

Canadian Co-operative Implements, Ltd. is a co-operative incorporated under the Dominion Companies Act. Its members are district implement co-operative associations, and it has written into its charter the co-operative principles of democratic control, open membership, limited interest on capital investment, and the distribution of surpluses on the basis of volume of business done with the organization by its members. In fact, all the features that distinguish a co-operative from a joint stock company are included.

The individual farmer is asked to invest his capital in the district implement co-operatives which are being organized in the three provinces. The farmer cultivating up to 200 acres (they do things on a big scale in the West) will subscribe \$10 share capital, and the farmer cultivating 800 acres and up will subscribe the maximum of \$40 share capital. The district co-operatives in turn invest the capital they receive from members in Canadian Co-operatives Ltd. Policies and control are invested in an annual meeting, composed of delegates elected by the district associations.

The president of Canadian Co-operative Implements, Ltd. stressed in a recent radio address, that the society is not set up to sell implements in the ordinary sense of the word — it is emphatically not a selling but a buying group. The savings will accrue to the members through the pooling of their buying power. A breakdown of costs given at government enquiries into the costs of farm implements showed that a piece of machinery costing a farmer say, \$300, has a factory cost of \$150. This includes all the labour and overhead. The large items of expense are incurred in selling, servicing, advertising, bad credit, agent's commission, etc. In all co-operative enterprises the reduction in these costs has been great, and it is believed that the same will apply in the case of the distribution of machinery.

The Society plans to handle a reliable standard type of each implement and that would become the Co-op. line. When they have assembled enough volume of buying power they will approach Canadian manufacturers and make large purchases of machinery for cash.

Membership in the Society at June 2, was 8,500, which was an excellent figure considering that the campaign for membership only got under way late in the fall, and canvassing in winter is hampered by bad weather conditions.

The plan itself developed from recommendations made to the special committee of the Saskatchewan Legislature

appointed to study methods for reducing farm implement prices. Both the committee and the Legislature itself agreed that the co-operative purchase of implements was the only plan that offered any real hope of success.

As the President said: "The amount of saving can be measured by the degree of co-operation that the farmers of Western Canada are prepared to give."

More than 30,000 groups of farmers in the United States are getting telephone service on a co-operative basis. Half a million families are served.

MAKING FERTILIZERS PAY

Many farmers do not realize that the *method* of applying fertilizer is just as important as the kind and amount used. Better methods of applying fertilizer increase its value, and save time and labour as well. The old method of broadcasting the fertilizer and dising it in "to get it dissolved so that it will be available for the crop" is a slow one and not as good as some easier methods, says Charles B. Sayre in "Farm Research".

Commercial fertilizer is already in available form when it is applied, and the aim in applying it should be to safeguard this availability and place the fertilizer where it will do the most good. Dising in fertilizer merely mixes it with the soil in a shallow surface layer where the plant food rapidly becomes "fixed" in a form which is not available for the crop. Fertilizer which is all in the upper 2 inches of soil is of little value, for it is in a place which is too dry for the roots to thrive, and where they are constantly being cut off in cultivation.

Some of the readers may question the statement that fertilizer that is dised in is merely mixed with the upper 2 inches of soil. Here is an experience quoted by the author in proof.

A vegetable crop expert was called to examine a soil on which crops showed a definite lack of lime in the soil. He tested a sample of the soil and found it very acid. The farmer laughed and said there must be something wrong with the testing kit because he had limed the ground that spring and had tested it and found it quite all right. The expert made another test, using the farmer's kit and got exactly the same result that he had before. The farmer was dumbfounded, but decided that there was something "phoney" about the sample of soil; so he grabbed up a handful of earth and tested it and triumphantly reported no acidity.

Immediately the professor saw what had happened and asked how the lime had been applied. The farmer said he had broadcast it and dised it in thoroughly. "That explains it" said the professor. "You can't get the lime deeper than 2 inches that way. When you took a sample for your test you just grabbed a handful of surface soil which had received all the lime. I took several cores of soil to a depth

FARMER GETS 42 CENTS OF CONSUMER'S DOLLAR

Studies by the Bureau of Agricultural Economics shows that in 1940 U.S. farmers received 6.2 billion dollars for producing the foods bought by American consumers. Consumers spent 14.8 billion dollars for these foods. The difference totalling 8.6 billion dollars, went to railroads, truckers, processors and manufacturers, wholesalers, retailers, bankers and other middlemen. On the average the farmer got 42 cents of the consumer's food dollar. The marketing system took 58 cents.

Sask. Co-op. Consumer.

MAKING FERTILIZERS PAY

of 6 inches and mixed them thoroughly before making my test. My test therefore gives a true picture of the condition of the soil in which the roots are trying to grow."

The farmer wasn't convinced, and suggested that maybe the professor hadn't ever seen a *good* job of dising. So he broadcast some lime heavily over a small piece of ground, got out his tractor and the heavy disc, set it as deep as he could and drove back and forth until he was satisfied he had demonstrated "a good job of dising in lime". Then he and the professor took samples of soil at different depths and found out that what the professor has said was perfectly true — the lime had only been worked in about 2 inches. Below that the soil was as acid as ever.

That was enough for the farmer. He put more lime on the whole field, plowed it under, and now has a very productive farm.

When fertilizer is dised in after broadcasting, the same thing happens as in the case of the lime. Most of the phosphorus and potash becomes "fixed" in the dry surface soil in an unavailable form. On the other hand, if it is plowed in, it is sure to be in moist soil and in the active root zone. Another effective means of applying fertilizer is to drill it in deeply in the final preparation of the land after the dising and harrowing have been completed. About 4 inches is as deep as fertilizer can be applied with the drill, but at this depth the fertilizer will be in the area where the roots are active, and it is deep enough not to be disturbed by the cultivator during the growing season.

In one test with tomatoes the largest yields were obtained where a small quantity of fertilizer was applied in bands $2\frac{1}{2}$ inches on each side of the row and 4 inches deep. This was done with an attachment to the transplanting machine that deposited the fertilizer at the same time the plants were set. The fertilizer attachments on most transplanting machines do not apply the bands deep enough, but a blacksmith can easily remodel the fertilizer shoes so that the bands of fertilizer will be put in the right place. In this test, 200 pounds applied in bands gave larger returns than 600 pounds applied any other way. However, care must be taken not to apply too much in this way. Large amounts of fertilizer in bands are likely to cause burning.



THE WOMEN'S INSTITUTES PAGE

*A section devoted to the activities of the Quebec Institutes
and to matters of interest to them*

SEASONAL ACTIVITIES IN W.I.'S

Agriculture

Several Branches in Argenteuil County were visited by the local Agronomist, Mr. Drummond, who addressed joint meetings of Elmside and Wyman Branches on tree planting and showed movies on agricultural subjects in the Branch meeting at Shawville. Mr. Drummond also spoke at Dundee and Clarendon on fertilizing of pastures, cheese products and insect control. Aubrey-Riverfield had an open discussion on dairy products and prices and Howick sponsored a garden contest, with prizes. The Farm Radio Forum was discussed at Ormstown meeting.

Mrs. R. E. Allen arranged and carried out a timely programme in Foster Branch, which included a study of injurious insects and a paper on the cultivation of flax, the latter accompanied by an exhibit of linen made from the native product. Cowansville studied bee culture. Mr. Walker of Macdonald College addressed the Branch at Brownsburg on gardening.

Mr. G. Adamson of the Adult Education Centre discussed Farm Forums in Ascot Branch, and Mr. W. G. Macdougall, Agronomist, showed agricultural moving pictures in this Branch.

Education

St. Armand is one of the Branches which is interested in Central School Boards and East Clifton also goes on record to that effect. The subject was discussed in Canterbury, another Compton County Branch. Dundee discussed manual training in schools, and libraries. Ormstown gave \$15.00 for prizes in the finals in the County spelling contest.

Mr. W. A. Drummond gave an illustrated address in Bristol Busy Bees Branch, jointly with Wyman and Elmside, on London, Alaska, Gaspe and the Maritimes. Shawville Branch was addressed by Professor Hamilton of Macdonald College. Lennoxville Branch sponsored a movie show in the High School for the benefit of the School Fair and its prizes. Mr. J. L. Heath, Principal of Hatley school, addressed Minto Branch on the educational needs of to-day, recommending the establishment of central High Schools to meet the needs of the few, while the other schools might become largely vocational schools to meet the needs of the majority. The present High School Course, Mr. Heath declared, does not now answer the needs of the majority of High School pupils.

Citizenship

St. Armand Branch is assisting in the organization of the local salvage campaign, also Windsor Branch. This Branch has taken charge of a "Bundle for Britain" for the

community and is busily collecting clothing and supplies for the purpose. Three layettes for British refugees have been provided. Elmside Branch had a paper on "Midnight is Curfew Hour in Quebec Night Clubs", and Wyman held a "quiz" on "What do you Know About Canada?" Lennoxville Branch has a representative in Sherbrooke Salvage Campaign Committee. Orford discussed the matter at its meeting.

Cowansville studied the growth of the British Empire. North Hatley appointed a representative in the person of Mrs. Wm. Kezar on the League for Women's Rights, now in process of extension.

Welfare and Health

A paper on emergencies in home nursing was a feature of the meeting of Aubrey-Riverfield Branch. Belvedere Branch provided transportation for children to the centre where anti-diphtheria inoculations were given. Wyman and Beechgrove had papers on the health of children, the latter Branch holding a discussion on first aid. The Bristol Busy Bees heard Mrs. S. E. McDowell on Child Welfare, and Mrs. Johnson, Supt. Of Pontiac Community Hospital addressed Shawville Branch on diphtheria and infantile paralysis. Cowansville studied various health subjects.

Home Economics

Compton County staged a Women's Exchange in late August. Members contributed articles in knitting, sewing, handicrafts, and served meals. A class taught Red Cross work, the whole proving a success both financially and in pleasure to all present.

Huntingdon heard a talk on nutrition by Mrs. Pierce, and Howick discussed methods of successful jelly making.

A salmon supper held at New Carlisle replenished the treasury of that Branch. Cleveland Branch held a successful strawberry social and other events, to assist in raising funds. North Hatley held a "White Elephant Sale" for the same purpose.

Red Cross and War Work

Many expressions of thanks, both verbal and written, have come to the Branches of Quebec Women's Institutes for their unceasing activity in the matter of war work. These have come both from the Red Cross authorities in Canada, and from the harassed people overseas.

Ormstown Branch subscribed \$13.00 to the Women's Institutes War Fund, and devoted \$9.00 to War Savings. Pioneer held an Amateur Night in aid of the Spitfire Fund in the County. The Shawville Branch supported a celebration in June, the funds raised going to the purchase of an

ambulance for war purposes. Nine War Savings Certificates were purchased.

Belvedere Branch forwarded to the Red Cross nine knitted articles, child's coat and bonnet, and sent boxes overseas to four Sherbrooke boys. A donation of \$10.00 went from Beech Grove Branch to the Pontiac Ambulance Fund. Shawville Branch received letters of thanks from Grey's Institute, England, for supplies of tea sent from the Branch. Wyman had rugs on sale for the benefit of the Red Cross at its meeting. Ascot Branch donated \$3.00 to a mobile canteen for Sherbrooke Fusiliers, gave \$5.00 to

the Queen's Fund and sent two quilts and a layette to the red Cross. Brompton voted money for wool for an afghan for the Red Cross. The members of this Branch meet once a week for Red Cross work. Cherry River held a successful Cafeteria supper for the benefit of the Red Cross. Lennoxville provided an afghan for the Red Cross, and donated \$5.00 to the Queen's Fund. Orford Branch is busy with Red Cross work.

Melboro Branch sent three layettes and several dresses made from remnants to the Red Cross.

W.I.'S SUPPORT NATIONAL SALVAGE CAMPAIGN

by M. Elizabeth McCurdy

THAT the members of the Q.W.I. are interested in the National Salvage Campaign recently inaugurated by the Canadian Government was indicated at the convention in June, the policy of the organization always having had a tendency in the direction of thrift and the lessening of waste. This is a fortunate fact at the present time as no other organized body of women is better fitted to assist with the campaign in the rural sections and small towns than the Institutes.

This does not mean that the members of the Q.W.I. are to devote themselves to the handling of the material known as salvage, but that they may organize for its collection in their vicinities at regular and advertised periods, arrange for trucks for its transportation and find a market for its disposal, thus greatly facilitating the purposes of the campaign.

As to the monetary value of this otherwise waste material there can be no possible doubt. Government reports for the first month of salvage collecting gave the total value sold at \$1,000,000 and the estimated value of one year's collections at \$12,000,000. This is a worth-while saving for its own sake and still more valuable when it represents a post-war saving in the taxes which will have to be met.

An inquiring Ottawa reporter brings the news of the Salvage Campaign now being carried on in Britain graphically before the Canadian public in the words of H. G. Judd, Controller of Salvage in the British Ministry: "The co-operation of the public is very encouraging" he declared. "But we need to recover more waste paper, more metal, more kitchen bones. Every scrap salvaged means labor, money and material saved, and needless risk at sea avoided." William Knightley, Supervisor of Canada's Salvage Campaign, urges Canadians to follow Britain's lead in collecting waste and turning it back to industry.

Lists of material needed for salvage have been repeatedly published. Bones are needed for glycerine for explosives. Waste paper is in demand for building and other purposes. Canada imports thousands of tons of waste paper annually, while her own goes to waste. Bottles find

a ready sale. Rubber tires sell for \$4.00 a ton. All rubber is in demand. Wool and cotton rags, metal of all kinds, especially aluminum, are needed. Around many farm properties there are to be found parts of discarded machinery which are of value. The order which "beat the sword into plough shares and the spear into a pruning-hook" has now been reversed and ploughshares are being converted into weapons of warfare. Sad, but necessary in this gigantic struggle for freedom and until Peace once more reigns over the country side of three continents.

An illustration of the money value of salvage is found in the collection of waste papers in a town of about two thousand population, when \$50.00 were received for one day's collection.

One matter should be clearly understood, which is that no individual or society stands to gain from salvage collection. This is a government scheme, and everything collected is to be devoted to that purpose, outside of actual costs of transportation, if any. Direct contact may be made with the head of the movement at the address given above. Several suits for racketeering have already resulted from misunderstandings and minor punishments have been meted out to offenders.

The work of handling salvage may be greatly facilitated and much time saved if a reasonable amount of sorting is done by the donors. This will often increase the value of the salvage as well. But however handled it is certain that the salvage campaign is proving a real boon not only to the country but to the individual owner who thus rids himself of many "white elephants" which now clutter up homes and lives.

A. C. C. W. CONFERENCE

The Journal went to press too early to report the important Regional Conference of the Associated Country-women of the World held at Ottawa Sept. 3-10. Women's Institute members of Quebec and Ontario acted as hostesses to visitors from the United States and representatives of many European Countries. A full account of the meeting will appear in the next issue.



DESIGNS FOR LEARNING

*"Travel opens the mind; but so does print;
and print is the cheapest mind opener
there is, and the best."*

— John Cotton Dana.

DESIGN FOR LEARNING

Someone remarked at Camp Macdonald.

"Why is it you people doing adult education don't speak out your mind about your work, and what it aims to do in the Macdonald College Journal the way you have at Camp? More people would understand what you are doing and would support it better."

A few nights before at a meeting of farmers at Fitch Bay, Mr. Taylor called me and said.

"Now tell us where all this is going to take us."

And there were only ten minutes to do it in.

* * *

At Camp Macdonald, and at Fitch Bay everybody was close at hand and friendly. When you talk to people your words come back to you in their faces. There is a communion that enables one to speak freely. The public reading these words is so much greater, and so widespread that it is difficult to encompass each one in thought as one writes.

But Mr. Taylor's question is too big to answer at once directly. It must be answered indirectly.

* * *

Adult education is great because it is for the people. The people are great in number. Their heart is great; in number they are strong. But beside their problems, — one need only mention — war, disease, unkindness, and poverty — beside their problems, the people are little and scattered.

You remember Gulliver's Travels!

On one island Gulliver was small among big people. He was tinier than a baby and like a baby he was important to the big awkward people with whom he lived.

One day he wandered away to another island. Where the people were so small he could rub them together in his hands like chaff. He was all powerful.

Until one day he woke up to find that these tiny folk had staked each one of his hairs to the ground and he was helpless.

I suppose the people of Liliput had a system of adult education so they perceived their peril and planned cunningly to cope with it. Adult education in that case was great. Because these people though small in size, were great in their unity.

How can a man say to a group of people, "Come, though your problems are great, you may solve them." They are often a people seasoned like a well worn axe handle with toil, and stress, and sweat. Some of them old, some young, but all wise with experience.

How can a man say to them — assail your problems like the little people of Liliput and all will be well. All

you need is more education, more facts, more experience — then all will be well.

* * *

But a man can say it. Knowing full well life has little luxury to offer. He can say it — if he has faith in people.

Barnum was once asked how it was he had made such a success of the show business, and with guessing what fakes and tricks would appeal to people.

He is credited with the saying, "There is one (fool) born every minute."

Adult education assumes there is one born every minute — one wise man. It is our job to put that mind to work. To train and equip it to do the work at hand.

* * *

In the old days a strong back and a weak mind would suffice. The folks used to say that a farmer needed only a strong back. In war the strong were victorious those days. In peace the strong seized the property. The weak no matter how wise were left with the women to keep house.

To-day — in peace or war, intelligence is the victor.

You need trigonometry to run a howitzer.

This war is a total war. Farmers are on the front line. Strong arm tactics, minus head work, are not enough. They must be as well-trained as a regiment. And as well organized. Or they will let Canada down. Haphazard methods, slip shod thinking, sloppy habits will result in irregular production, bad financing, poor returns, and low-grade products.

Agriculture has the man power, the machinery, the intelligence, the soil, the climate. Canada is in peril.

To fail through lack of training, forethought, or planning; to fail through lack of adult education is treason.

To put the mind and muscles of men to work is the job of adult education.

REMEMBER — the open meetings of the Community Schools

Bury and Sawyerville	Monday,	Sept. 22
Lennoxville	Tuesday,	Sept. 23
Stanstead and Ayer's Cliff Wed.		Sept. 24
Richmond and Asbestos	Thursdays,	Sept. 25

Please note the change of nights between Sherbrooke County Schools and Stanstead County Schools.

PARENTS AND CHILDREN

by Mary Avison

This column will welcome comments or questions on the problems it deals with, or on others that arise in every normal home.

School Again

September — all over the province, all over Canada, schools will be opening; children will be starting back to work, — and teachers too. What part have parents in the excitement, the regrets and the enthusiasms that accompany the opening of a new school year?

From many homes parents will be sending a beloved son or daughter on his first adventure into a new and larger world and will be wondering how they can help him through these first strange experiences. Happy the small child who has not been made fearful by threats of what the teacher will do but who looks forward to it all with glad anticipation. He will not feel timid and unable to cope with a terrifying and unknown world if he has been prepared for this important day by happy tales of school and, perhaps, by an earlier pleasant visit to the teacher. If he has been trained already to care for his own personal needs of dressing and undressing, of cleanliness and toilet, he will be confident and capable in these situations. The companionship of some friend or neighbour just old enough to know the ropes, yet not so grown-up as to make him feel completely dependent, will give him assurance when he feels shy or uncertain. Should he appear unhappy or unsure of himself in these early weeks, parents would do well to check over the preparation he had, to find the cause of his difficulty, and then help him to adjust to it. A year is not too long to look ahead and parents whose children will begin school next autumn can start now to prepare their little ones in habits of self-reliance, sociability and independence. The months go by so quickly!

From many homes, older children will be going back to a familiar routine and the novelty of a new grade or new teacher. Their readiness to go, their health, their enthusiasm will to some extent be the measure of the kind of holiday they have had. Now is a good time to look ahead and plan for the winter. In my experience children fall into two classes, those who take on far too many things to do out of school hours and those who have no extra-curricular activities. Music lessons, mission band, football, Jr. W.A., C.G.I.T., Guides, Scouts, carpentry classes, sewing classes, home-work and home responsibilities over-fill the time of the first group; the others wander about, bored or mischievous, wondering what to do next. This may be due to individual differences in children themselves or to differences in parents and the influence of the home; but, whatever the cause, either extreme is unsatisfactory both from the point of view of the school and from the point of view of the child's real needs. Children 'get into' all these activities without exercising much judgment, — or are left

out because they lack initiative and 'no one thought of them.' Parents should help to plan for outside interests, in moderation and within the limits of a child's time and energy; teachers can often help with advice in the choice of what those activities should be, to meet the child's individual interests and particular abilities. Make a friend and counsellor of the teacher, if at all possible. She will know your child, not better than you do but differently, and can often add to your understanding of your child's problems and interests.

Think of the Teacher, too

Those parents who have been teachers will remember the first weeks of a school year and will, I hope, have memories of a warm and friendly welcome each autumn. But too many communities take so easily for granted the service that teachers give, often far beyond any compensation, when the word of commendation or appreciation, the gesture of welcome and hospitality and friendliness could mean so much. If, as in some communities, the School Board plans a "welcome home" or a reception for its teachers, support it enthusiastically. If this is not yet a custom in your district, a group of parents or a local organization could initiate such an expression of interest and co-operation with the school staff.

When there are new teachers, — new to your district, perhaps also new to teaching, — what can parents do to make them feel that interest and understanding, patience and faith are available to support them through the year? Meet them, visit the school, invite them home. The better you and the teacher know each other, the better she knows your home and your children in it, the better teacher of your children she can be. Do not forget that she needs your hospitality and friendliness not in the first few weeks only. The second month when she has met everyone but doesn't quite belong or feel at home anywhere, is often the loneliest for a new-comer to a community.

But do not expect too much of your teacher. She needs time to herself as do you and your children. See that the community and the church do not impose on her for too many 'extra-curricular activities'. A too-crowded life is not good for her any more than for your boy and girl!

ADULT EDUCATION NOTES

Arthur Haas, an Ontario farmer, who has had experience in the last two years, in setting up folk schools in Ontario and Manitoba is working with the Adult Education Service on the community schools.

Alex Sim has been appointed Secretary of the National Farm Radio Forum — a responsibility which he will carry in addition to his work with the Adult Education Service.

The offices of the Service are now located at the corner of William and Montreal Streets in Sherbrooke.

Getting a Quart of Milk a Day Into Johnny's Diet and Yours!

by Alice Stickwood

A CHILD'S food habits are built up in the early years of his life and it is very important that they should be good. Mothers and fathers are faced with many problems in training and care of their children but those centering around the eating of their food are often the most defeating. The child alone is responsible for eating and no parent, however devoted, can swallow and digest his food for him.

A healthy child who has an abundance of the right kinds of food grows normally and is contented and well-developed. His legs are straight and strong and his weight is satisfactory for his build, height and age. He has an alert expression. He is active and has a good appetite for his meals.

The food a child eats must furnish material for his growth and development and must meet the demands made by his ceaseless activity.

Food does this in three ways: by building and repairing all parts of the body, by keeping it healthy and regulating its running order, and by furnishing energy for work and play.

The Fundamental Foods

The building materials required in the construction of the body are proteins, water, and minerals. The proteins found in milk, cheese, eggs, and meat are especially valuable for growth. The child needs a liberal supply of some of these during his years of rapid development.

Minerals are used in the structure of all body fluids and tissues. In planning the growing child's diet, three minerals, calcium, phosphorus and iron, must have special attention because they are not abundant in all foods. Other minerals are needed too, but are likely to be supplied in sufficient quantity in any mixed diet.

Milk is the best source of calcium and phosphorus. The foods richest in iron are egg yolk, green leafy vegetables, dried fruits, whole grain cereals, liver and lean meat.

The Value of Vitamins

Water, minerals and vitamins act as regulators. Vitamins stimulate growth and a good appetite and help to prevent certain deficiency diseases. To be protected from even a tendency towards deficiency diseases and to increase his resistance to common infections, the child must eat some foods rich in vitamins each day. A varied diet made up of many fruits and vegetables, some of them raw and none of them overcooked, whole milk, butter, eggs, meat and some entire grain cereals, provides the child with the vitamins he needs. Cod liver oil may be taken during the winter months as a safeguard to health.

Energy Foods

In addition to building and regulating the body, food must provide material for energy. As children increase in size and weight and become more active, their need for

energy food grows larger. The best practical measure of sufficient energy food throughout the growing period is the child's steady gain in weight.

It has been shown that milk is the best foundation on which to build meals for both children and adults. A daily allowance of a quart of milk per day for each child, particularly during the years of most rapid growth, will supply the required calcium, as well as considerable amounts of protein, vitamins and other growth promoting factors. A pint of milk daily is beneficial to adults too.

A homemaker who sees that the satisfying, well-cooked meals she prepares for her family contain a liberal amount of "protective foods"—milk, fruit, vegetables, eggs, meat and whole grain products—may feel assured that she is looking after her family's food requirements. Milk is the first food to be considered, and it is an easy matter to get enough milk in the daily meals. A healthful habit is to serve at least two milk dishes such as cream soups, scalloped dishes and milk desserts every day. Usually adults drink some milk during the day. Along with cooked dishes, and adult's milk quota will be supplied in this way.

Most children like to drink milk, but occasionally a child has a dislike for it. Then the mother is confronted with a real problem, for a "milk appetite" must be created by preparing it in appealing ways. With younger children, good results may be obtained by allowing them to drink the milk through coloured straws or by changing the appearance and flavour of the milk by making special milk drinks. Stories about athletes and people who drink milk to grow strong and healthy appeal to children and are affective. Children like to be independent, and allowing the child to use his own pitcher and glass may have the desired result. For children who refuse to drink milk in any form a considerable amount may be incorporated in the child's diet by regularly serving cereal cooked in milk; vegetables, fish, chicken and meats with cream sauce; cream soups; and milk desserts.

The recipe which follows gives directions for making only one of the countless number of nourishing foods and drinks which may be prepared with milk.

Cream of Vegetable Soups

(Basic Recipe)

4 tablespoons butter,	2 cups cooked vegetable
4 tablespoons flour,	finely chopped or rubbed
2 cups milk,	through sieve,
2 cups water in which	Onion if desired,
vegetable was cooked,	Salt and pepper to taste.

Melt butter and blend in flour. Add milk and vegetable water, using all milk if desired, to make up four cups liquid. Cook until mixture thickens, stirring constantly. Add strained vegetable pulp and chopped vegetables. Season to taste. Carrots, celery, peas, string beans, spinach, onion, asparagus or a combination of vegetable may be used.



THE COLLEGE PAGE

News of the College — Staff, Students, Graduates

THE YEAR BEGINS

Our desk calendar says that in less than a week from the time this is being written the students of the School for Teachers will be with us once more. They registered on the second of September, and by the time this page gets into print college will be starting to be an old story to them, for they will already have been here a fortnight. They will know their way around the campus and will remember which building is which. No longer will they be asking one another which room the English lecture is given in, or where to go to buy pencils and textbooks. They will know their way around the village of Ste. Anne and which stores offer the best values. New friendships will have been formed and a class spirit will be developing; they will have elected their officers for the year. All will have written at least one letter home, telling how they enjoy college life, giving their impressions of their professors, and perhaps telling something of the reception which was held in their honour on the first Saturday after their arrival. In a word, they will be settling down to college life.

The Homemaker students arrived on the tenth, a week after the Teachers. These girls come from all over Canada to learn the intricacies of modern housekeeping; how to plan menus to get the most value from food and how to prepare the food appetizingly; to learn to operate the modern household equipment that is available for home-keepers today and to study enough of chemistry, physics and bacteriology to understand the reasons for the various steps in food preparation and preserving.

There will be forty students in the class this year, many of them, of course, from the Province of Quebec. But some are coming from British Columbia, some from Newfoundland, and two have even come from as far away as Jamaica to spend a profitable year at Mac.

At the present time indications are that registration in the different courses will be about the same as last year, with perhaps a slight decrease in Agriculture. This is only to be expected, as many men who would normally have gone on to college are in the armed forces in one branch or another. The registration in the School for Teachers is below that of last year which is particularly unfortunate

in view of the scarcity of trained teachers which exists in the province today. There are very few men in this course this year. The Homemaker class will be one of the largest for some time. With a number of new students entering the second year of the B.H.S. course via senior matriculation, this class will be considerably larger than it was last year. It is still too early to predict how many Diploma students will be with us this session.

Returning students will see changes among the staff, and will miss some of their classmates who for one reason or another will not be returning. Mr. McMaster of the Bacteriology Department and Norbert Beaupre, coach and warden of the Men's Residence, have accepted commissions in the Army Service Corps. Dr. R. L. Conklin, Professor of Animal Pathology, has resigned and is now in Indiana doing research work. William Kalbfleisch of the Agricultural Engineering Department, who was always glad to help out when some new piece of machinery or apparatus was to be designed, is using his talents in the Civil Service at Ottawa, devising new uses for machinery in agriculture. R. J. Hilton left the Horticulture Department at the end of last session to take a position as manager of a large farm in Newfoundland. Lorne Brown of the High School staff, who spent a busy winter with the C.O.T.C. and the High School Cadet corps, is teaching in Sherbrooke this year.

A number of last year's students will not be returning. H. S. Murdy and Bruce Bolster, both of whom were in the second year last session are in the army — the former in the Black Watch, the latter in the R.C.A.S.C. C. E. Everett, Alvin Ness and Bud Brittain are all in the Air Force, and so is R. H. Wallace who was a partial student in Bacteriology during 1940-41. Both Burns Russell and A. L. Metcalfe joined up. Our records, which are probably incomplete, show that so far seventy-five students or graduates of Macdonald College have enlisted. One of these, D. C. Dougall, '39, who, as we reported in last month's issue, is a prisoner of war, has been awarded the D.F.C. for conspicuous bravery.

We deeply regret to record the death by drowning, in Nova Scotia early in August, of D. B. Trueman. Mr. Trueman would have graduated in Chemistry this year.



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

JUNIOR CLUB ACTIVITIES

Two years ago there were no Junior Sheep Clubs in Quebec. This summer there were three; at Val David, at St. Jean des Piles and at St. Augustin. Several more will be organized this fall. Thus the Provincial and Federal Departments of Agriculture keep step with the trend toward increased sheep raising in this country.

Junior Sheep Clubs are organized by the regional agonomists on authorization from Quebec and Ottawa, and a club may be established in any district which is suitable for sheep. Each club is organized for a 2 year period and must have at least 12 members, boys or girls, from 12 to 21 years of age. A president, vice-president, and a secretary-treasurer are elected, and 2 adults are chosen to act as advisors. Only two members from any one farm are accepted.

A club may decide to raise either pure-bred or grade sheep. If pure-breds are chosen, each member must agree to buy at least two but not more than five pure-bred ewes, two years old or less, which shall be mated to a pure-bred ram of the same breed. All the ewes bought must be of the same breed.

Should the club choose to raise grade sheep, each member must buy at least three but not more than ten grade ewes of uniform type and not more than two years old. These will also be mated to a pure-bred ram. All ewes must be purchased before November 15th and must be properly marked by tattooing or by ear tag. Breeding rams may be borrowed from the Dominion Production Service. Two XXX rams will be loaned to clubs having grade ewes and one XXX ram to clubs having pure-bred ewes.

Club members learn by doing

The club members will be required to take complete charge of the care, feeding and management of the ewe flock and lambs, and to

1. Dip their sheep once each year.
2. Treat them against internal parasites.
3. Shear them before June 15th.
4. Market co-operatively any wool not used on the farm.
5. Castrate the grade ram lambs when about 10 days old.
6. Market their lambs co-operatively as much as possible.
7. Make the necessary arrangements for breeding the ewes.

8. Make reports, on forms furnished, on the cost of production of their lambs, on marketing of lambs, sale of wool, etc. These reports go to the Montreal office of the Production Service and to the Sheep and Swine Division at Quebec.

Federal and Provincial Assistance

The Government helps club members to buy their ewes, and experts visit each club the year after it is organized to demonstrate how to dip and shear the ewes, how to dock and castrate the lambs and how to treat parasites. They also attend at least two club meetings during the year.

Prizes and Competitions

Each club has a chance to win money during the year, for 15 prizes, ranging in value from \$12.00 to \$4.00 have been authorized. These are awarded on the number of points made according to the following scheme.

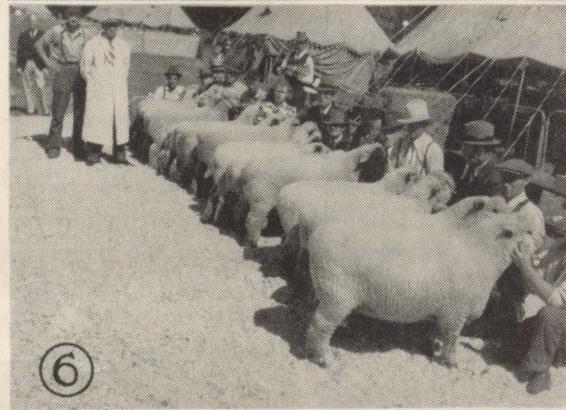
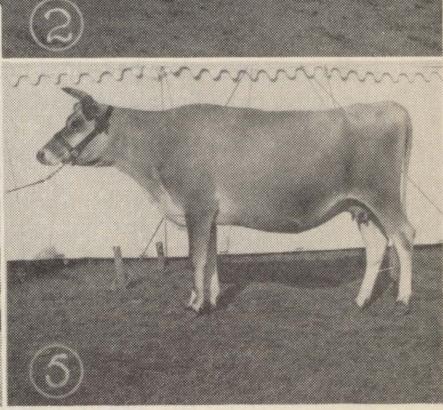
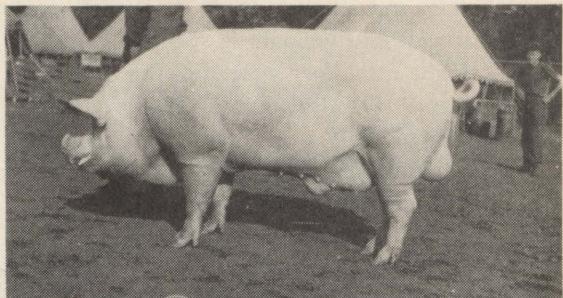
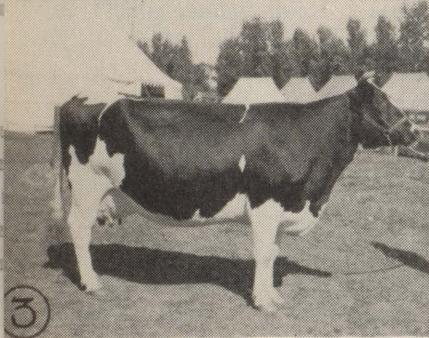
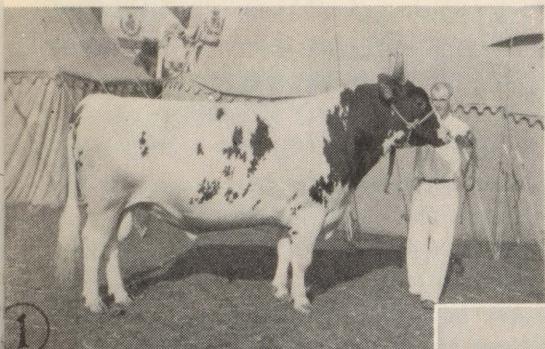
1. Entries at lamb fair:	
Class 1 Two ewe lambs	50 points
Class 2 Two ram lambs or wether lambs	50 "
2. Judging competitions:	
Placing	25 "
Reasons	25 "
3. Care of flock	100 "
4. Attendance of members at meetings and demonstrations	50 "
5. Reports	50 "

Inter-club competitions

Competitions are arranged between clubs for which five prizes totalling \$50.00 are given. In the wool contest a club entry of 10 fleeces is sent for judging to the Canadian Wool-Growers' Co-Operative at Lennoxville. These 10 fleeces must be supplied by at least 5 of the club members. Judging competitions for which another \$50.00 is set aside for prizes, will also be held each year between the different clubs.

HELP BRITAIN BY EATING 50 PER CENT LESS FRESH PORK, BACON AND HAM

EXHIBITION UNDER CANVAS



1. P. D. McArthur's Cherry Bank Winter Royal.
2. Grand Champion Yorkshire Boar.
3. M. L. McCarthy from New Brunswick showed the female champion in Holsteins.

4. A general view of the fair, showing the tents in which the livestock was quartered.
5. Grayburn Favourite Sandra, owned by the Jersey Health Farms.
6. A group of Oxford Downs ready for the judge.

Rain, after avoiding the Ottawa Valley for most of the summer, finally visited the district just in time to add to the troubles of the directors of the Central Canada Exhibition. Last year the "Ex." was not held, since all the permanent buildings on the Bank Street exhibition grounds were occupied by the Army. The soldiers are still in possession of the buildings, but the directors decided to go ahead with the fair this year notwithstanding, and all the exhibits — livestock, handiwork, industrial and commercial displays — were housed in tents. It was the largest exhibition ever to be held under canvas in Canada.

A record crowd of 20,000 visited the show on the opening day, which was fortunately fine. On Wednesday, another fine day, the grandstand was completely sold out for the evening performance. Intermittent rain on other days, however, brought discomfort to exhibitors, spectators and employees, and interfered with the programme of judging.

Ottawa,

Aug. 18-23

A feature of the fair was the presence of the military mobile convoy which has been touring Eastern Quebec all summer to aid the recruiting campaign. The men of the convoy gave their splendid demonstrations twice daily in front of the grandstand and staged a parade each morning through the city streets. The sham battle which closed the demonstration was particularly interesting to the spectators, but the noise of the big guns firing and the explosions of the bombs did not make things easier for the judges who were trying to place stock not far from the scene of "battle."

Quebec takes awards in Jerseys and Ayreshires

Only 4 Jersey herds were out, and the Jersey Health Farms, Isle Bizard, took all the championships in the various classes with the exception of the senior female, which went to F. W. Argue, Carp, Ont. on Elmvale Volunteer Buttercup. The Farms placed first in nearly all classes, losing out to Argue in two and to Dr. W. A.

Armstrong, Ottawa, in three. Grayburn Favourite Sandra was grand and reserve senior champion female for the Farms and Bizard Dark Lad took senior and grand championship honours in the bull classes.

Eight exhibitors were showing Ayreshires and in these classes P. D. McArthur of Howick had senior and grand champion bull on Cherry Bank Winter Royal, junior champion female on Cherry Bank Royal Marine, and took first place for senior yearling heifer and for his junior herd. John Bompas, Bells Corners, had reserve junior female on Pineview Topsman, senior and grand champion female on Springbank Mickey 8th and three other firsts. Wyman McKechnie, Wyman, Que. took first place awards for his bull calf and also had the junior and reserve grand champion bull, Bonnie Shade Golden Pride.

Holsteins

M. L. McCarthy, Sussex, N.B. walked away with all the Holstein championships but one, junior champion bull, which was taken by Geo. C. Bell. Bell, on the other hand, had the reserve champion in all but two classes, where W. J. Fawcett had reserve junior male and female. Nine herds were out.

Beef Cattle

A good number of Shorthorns and Herefords paraded before the judges. Jersey Health Farms showed the female

champion Hereford, while Monte Vista Stock Farms, Enfield, N.S. took the grand and reserve bull championships and the reserve grand championship female. John Gardhouse and Sons, Weston, Ont. had the grand and reserve champions in both bull and female groups.

Sheep and Hogs

The large number of entries in the sheep classes, and the rain, made it necessary to spread judging over two days. Six breeds of sheep were represented, Oxford Downs being in the majority.

Of the 19 bacon hog classes, D. M. Stewart, Osgoode Station, won 9, and Alex Dynes, Ottawa, won 8. Stewart took 4 championships, Dynes 2. Keith Bulmer and D. A. Cumming were also showing.

Horses

The champion Belgian mare was shown by Mrs. Margaret Doorly of Montebello. This was the only first taken by a Quebec exhibitor, except in the Belgian progeny of dam class which was won by E. C. Budge, Ste. Genevieve. Only 2 exhibitors showed Clydesdales, Hector Aubrey of Ottawa proving an easy winner. Three exhibitors were out with Percherons, P. J. Hendrick of Hull having the champion mare. The champion standard bred was shown by Dr. Metcalfe, Almonte, Ont.

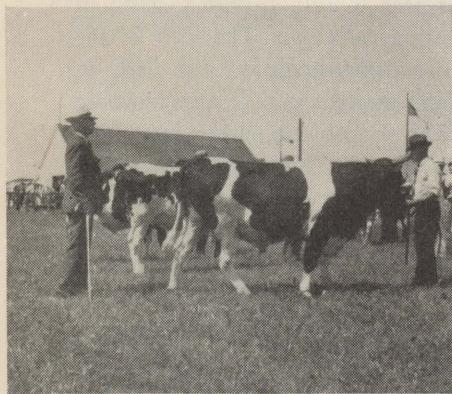
GOOD REGIONAL FAIR AT ST. HYACINTHE

Thousands of visitors, good exhibits, and beautiful weather during the three days, August 5 to 7, combined to make a success of Ste. Hyacinthe's first regional fair. The huge arena and spacious fair grounds made a splendid setting for the event.

Cattle entries alone numbered over 600; 218 Holsteins, 140 Ayreshires, 135 Canadians; 116 Jerseys and 30 others. Sheep, hogs, and poultry were also well represented.

Evidence of the interest in horse raising in the district was given by the presence of 57 Canadian, 40 Belgian, 30 Percheron, 42 crossbred and 78 light and harness horses.

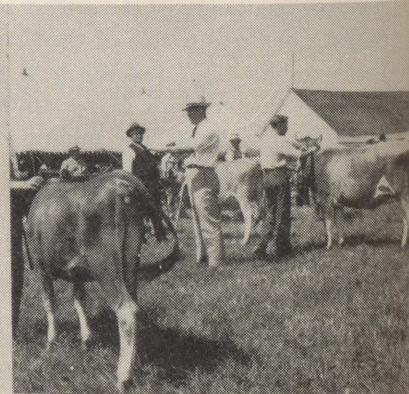
The Department of Agriculture was represented officially by Mr. Raoul Dionne. Messrs. S. J. Chagnon, Gerard Tremblay, Stephene Boily and W. L. Carr judged the cattle entries. Horses were placed by A. St. Pierre and E. Brunelle.



Left — W. L. Carr judged the Holsteins.



Centre — Handicraft exhibits filled almost one side of the huge arena. The other side was occupied by the exhibits of commercial firms and the display of the Department of Agriculture.



Right — Stephene Boily placing a class of Jerseys.

Help for Bacon Producers

Between January 1 and September 1, 1942, in order to encourage an increase in bacon production in the Province of Quebec, the Department of Agriculture will pay the following bonuses to farmers 60% of whose hogs in any one shipment were graded "A" or "B(1)" by a Federal grader.

A bonus of \$1.00 for all hogs graded "A".

A bonus of .50c for all hogs graded "B(1)".

To obtain the bonuses described above, each farmer must:

- a. Fill out and sign a form of application for bonus, and send it to the county agronomist before November 1, 1941.
- b. Send his official grading report bearing the official stamp, which he receives from the buyer or shipper of his hogs, to the Sheep and Swine Division, Department of Agriculture, Quebec. Receipt of this will be acknowledged by the Department. If this acknowledgment is not received within 30 days after the report is sent to the Department, enquiries should be made, as no claim will be considered after 60 days.
- c. Make sure that the name and address as shown on the grading report is the same as on the application for bonus. Any difference will cause trouble when bonus payments are being made.
- d. Breed his sows to a pure-bred bacon type boar.

Not more than \$25.00 will be paid in bonuses to any one farmer.

The following persons are not eligible to receive these bonuses:

- a. Hog dealers or truckers.
- b. Farmers who do not raise, on their own farm, all the hogs they sell for slaughter.
- c. Farmers or raisers who feed their hogs on garbage from a city.

All Flax Seed Must Be Labelled Under a New Regulation

A new regulation under the Seeds Act requires that all flax seed sold in Canada must be labelled to indicate whether it is fibre flax or oil flax seed states the Plant Products Division, Dominion Department of Agriculture.

The purpose of this regulation, which is now in effect, is to give assurance to buyers that they are getting the kind of seed they want—fibre flax or oil flax.

Owing to the higher prevailing price for seed of the fibre variety, there has been a growing tendency to represent oil flax seed as fibre flax seed. Last spring several cases of this kind were brought to the attention of the Department. Buyers were warned to beware of fibre flax seed offered for sale that did not carry evidence that it had been approved by the Dominion Department of Agriculture. Despite the warning, applications recently received from growers for crop inspections have disclosed that the selling of unauthorized fibre flax seed last spring was widespread.

The new regulation provides also that the only seed that

may now be sold as fibre flax, must have been produced from crops approved by the Plant Products Division, Dominion Department of Agriculture, and when sold, labelled "Fibre Flax". All other flax seed must be labelled "Oil Flax", under the terms of the regulation.

This measure is considered particularly necessary at this time when special efforts are being made to promote the production of high quality fibre flax in Canada, which is urgently needed for war purposes.

FIGHTING AMERICAN FOULBROOD

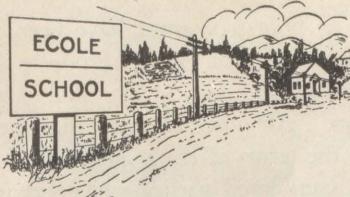
A battle is being fought on behalf of the beekeepers of Quebec to help them get rid of American foulbrood in their hives. Since June the Department of Agriculture has had two specially equipped trucks on the road, one on each side of the St. Lawrence, treating infected hives. Already 133 apiaries have been disinfected, and the work will continue until all apiaries in Quebec have been visited.

Each truck carries a boiler, autoclave, sterilizer and a wax-melting tank. As soon as the disease is discovered in an apiary, a call is sent to one of the trucks, which goes at once to the farm in question. Here the driver, with the help of the beekeeper, melts the wax combs and sterilizes the hives and frames by boiling them in a solution of lye. To date 503 colonies have been destroyed, but the Department compensates the owners for their loss.

The service is proving very popular. With the Department using its own equipment, especially designed for the job, the beekeeper is saved a lot of work. Disinfecting is done properly, and one feature which the farmers appreciate is that the sterilized wax can be used again without any danger of re-infection of the hives.



We present herewith Miss May Anderson, Fertile Creek, Howick, Que., standing in the garden which won her the cup last year for the best school garden in the District of Beauharnois. Miss Anderson won out over a field of between five and six hundred other boys and girls. She has a good garden again this year but indications are that she will be up against stiff opposition. We hear that there are several others who are going to give her a run for her money.



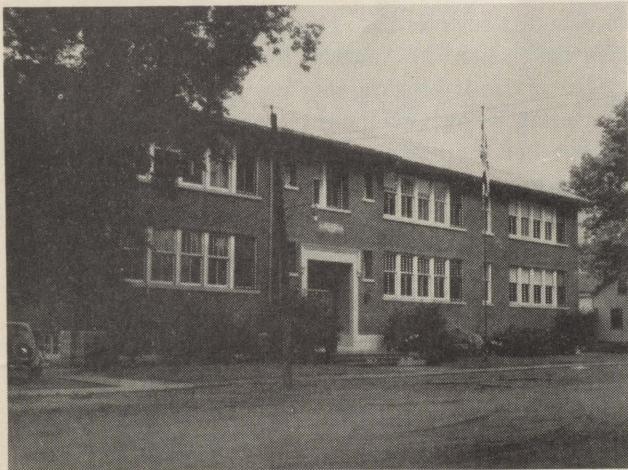
SCHOOL PROBLEMS AND VIEWPOINTS



Ormstown's Community School

by D. C. Munroe

THE HISTORY of education in Ormstown is typical of many of the English-speaking rural areas of Quebec. The one-room elementary school was first planted in the village and at various points throughout the surrounding parish about a century ago. At first it was a private institution, then it was taken over by the publicly-elected School Board, and, about the end of the last century, the village school became a County Academy. As such it drew a few pupils from the farms nearby, but the parish and village boards managed their affairs quite independently until a consolidation was effected in 1932. Parallel with this gradual development, there has been a steady growth in enrollment and in staff, and a slight expansion of the curriculum. This evolution has resulted in what might now be called a *community school*.



Ormstown School

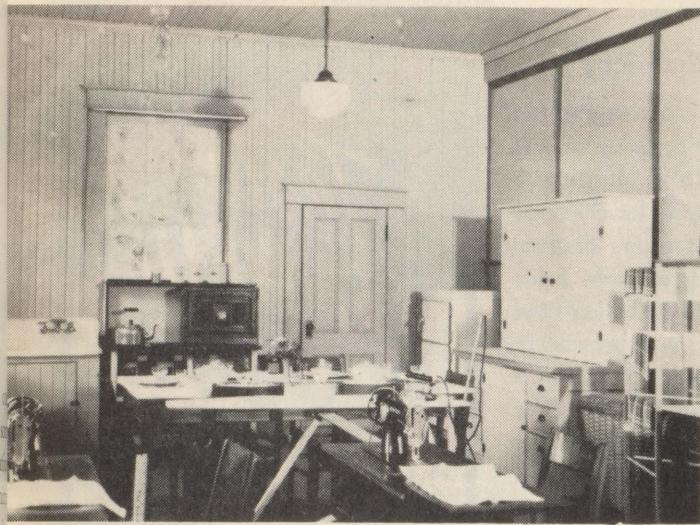
Since the consolidation of 1932, the average attendance has been 230 pupils distributed through the eleven grades. About two-thirds of these come from farm homes in the parish and are conveyed daily in seven buses which operate on thirty to forty minute schedules. The staff is at present composed of nine full time and one part time teachers, five of whom hold High School or Specialist Diplomas. The grades below Grade VII are combined, two in a class-room, while the senior classes each occupy a separate room. In addition to the eight class-rooms, the School is equipped with a woodworking shop, domestic science laboratory, chemistry laboratory, basement assembly hall, principal's office and teachers' common room. The building is modern, having been completed in 1932, and is surrounded by large playgrounds.

Practical Arts Included

Four years ago, members of the Board began to consider the introduction of manual training and some encouragement was offered by the Department of Education, though no definite commitment was made. A committee was appointed to investigate the matter and the members visited Macdonald College and some of the schools of Montreal. This led to a favorable decision and plans were made immediately to proceed. One of the male members of the staff was sent, at the Board's expense, to the Ontario Vocational Normal School in Hamilton and orders were placed for the necessary equipment. A section of the basement playroom was partitioned off and nine double work benches were built by a local carpenter. Tools were purchased through local merchants on a cost-plus-five-per-cent basis and these economies brought the cost of alterations and equipment within the reasonable figure of \$650.00. Half of this expense was assumed by the Department of Education.

The classes have now been in operation three years and have proved very successful, though there are still some difficulties to be overcome. The boys in all the grades from VI to X are divided into four groups and each of these groups has one shop period of two hours weekly. The subject is compulsory for boys and is an option with domestic science. The departmental course of study has been followed in part, but this has now been thoroughly revised and a number of larger and more practical projects have been introduced. During the past year the boys have built saw horses, hat stands, step ladders, window boxes, bicycle stands, tables and a number of simpler articles. So far the principal difficulty has been to find a suitable instructor. The first one left at the close of a year. Then a pensioned craftsman was engaged and he carried on acceptably until illness compelled him to resign. Since that time a general handyman has carried on the work; while some progress has been made, the present arrangement is only temporary.

To balance the woodworking program, domestic science classes have been offered for the girls. Sewing and knitting only were taught the first year; but the year following an up-to-date laboratory was installed and a specialist, holding a B.H.S. degree, was appointed to take charge of the work. Care was taken to select equipment of the type used in the homes of the community—coal oil stove, ice refrigerator and treadle sewing machines—and, once again, the cost of the alterations and utensils was kept to a minimum, about \$1000.00. The teaching of this subject has been most satis-



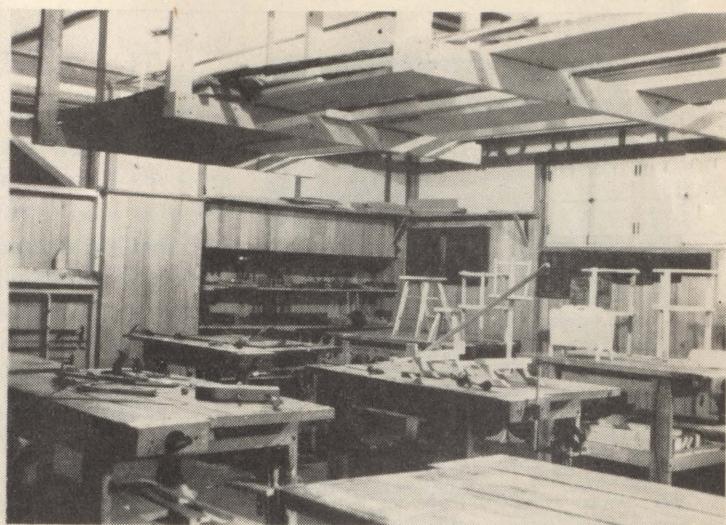
The household science room

factory, although the instructor is required to teach academic subjects as well as her specialty. Our present teacher has been with us two years and will next autumn give a home economics course for adults under the Ormstown Study Club and at the request of the local Women's Institute.

Adult Program Developed

The Ormstown Study Club is another feature of the school program that has grown up within the past two years. A series of Open Nights was inaugurated five years ago and these were devoted to a variety of themes connected with the work of the school and current affairs. Adult classes were frequently discussed among the citizens of the district and, when a public meeting was called in October 1939, the response was immediate and emphatic. A committee was appointed, a program was drawn up and the first courses were given two weeks later. Two terms of four weeks each were arranged—French and Citizenship being given in the first, Public Speaking and Current History in the second. The leaders in these classes were members of the executive or of the school staff and served without remuneration except in one instance. The courses were attended by most of the sixty-three club members and a library was operated for any who wished to use it. The fee of \$1.00 and an additional 25c for the library was sufficient to pay all expenses.

From suggestions made by the members, some alterations were made in the program offered the second year. In place of the four week terms, it was decided to hold one term of six weeks (which was eventually lengthened to eight). Some optional courses were also decided upon, so that when classes opened on October 16th, Home Nursing and Farm Problems were held concurrently at 7.30 and Choral Singing at 8.45. When the membership grew to 115, some adjustments were necessary. The Home Nursing Class was divided into two and, finally, into three and a second instructor engaged. The Farm Problems discussions were led by a number of outside authorities and proved so interesting that the meetings seldom finished in time to allow the members to attend the Choral Singing. Nevertheless the latter course, given by a visiting choir leader from Montreal,



The manual training department

was a great success and the members contributed several numbers at a closing concert, given in aid of the Council for Overseas Children. The regular instructors were granted an honorarium for their services; \$10.00 in books was given to the School; a librarian was engaged to serve throughout the year; assistance was offered in organizing the Farm Radio Forums; and still there is a balance in the Bank!

Plans for next year are not, of course, complete; but many suggestions have been offered from which there should be no difficulty in selecting attractive courses. Home Economics and Farm Problems will certainly be offered in the program, the library will be continued, and the principal problem seems to be—how to get everything in during a Wednesday evening. The present executive is composed of a local doctor, the chairman of the School Board and principal of the School, a nurse, a housewife, the local bank manager and there is one vacancy caused by the removal of one of the clergymen from the village. Other members are, in addition, often asked for their advice, especially in drawing up the program. In this way the Club's activities reflect all the interests in the community.

At a time like the present, when mechanical, scientific and social changes are coming swiftly upon us, there need be no apology for innovations such as these. For some years now, our Department of Education has endeavored to break the academic strangle hold on the school program and so far it has met with only limited success. There is still need for the basic subjects, English and French, for the social studies and general mathematics; but there is also a necessity for practical studies and skills, such as domestic science, wood and metal working, mechanics and natural science. And it is no less important that a powerful social agency like the school should not lie dormant by night or stagnant through the summer, while the world is a chaos of misunderstanding twelve months of the year. To give sound and practical education to the child, to give help and pleasure to the adult, to give sympathy and leadership to the whole community, these are surely the fundamental duties of the modern school.

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Stable Ventilation

Visiting farms with the Merite Agricole Commission provides a good opportunity for a detailed study of farm equipment. Except in districts where the vigilance of Montreal Health Department inspectors insist on adequate ventilation, provision for air change in stock barns is still more or less sketchy. Often we find a few intakes and no out-takes, or the equipment may be the other way round, which is better if there is sufficient capacity, but this is seldom available.

In ventilation the following factors are of primary importance:

1. The out-take is more important than the intakes as it controls the rate of air change. Ordinarily 30 square inches of area of out-take per mature animal, in cattle or horse barns, is required.

2. Leakage through the walls and ceiling will usually supply the air taken out by the out-take flue, but the air will not likely be properly distributed. Intakes should therefore be well distributed around the building, should not be larger than about 40 square inches in area, but enough should be used to equal 75 per cent of the cross section area of the out-take.

The Weed Problem

To one who has had experience in the control of such weed pests as twitch grass and the perennial sow thistle, the extent to which these pests have gained a foothold in our best farming districts is alarming. In hundreds of grain fields in the rich Yamaska and Richelieu river valleys these pests are now present in force, sometimes only a sprinkling or a few patches, but more often three quarters of a field are covered with the yellow sow thistle bloom while twitch is choking out newly seeded clover stands. It is true that many farmers in these areas have only recently changed from hay farming to rotational agriculture and have not yet learned the seriousness of the weed problem. It looks as though education and more rigorous enforcement of the weed control laws are necessary. The problem is a serious one.



Our upper picture gives an idea of the crowd that attended the annual sale at R. R. Ness & Son's Burnside Stock Farm at Howick early last month. Below, auctioneer Franklin calls for bids on the calf sold in aid of the local Red Cross. Douglas Ness' daughter is leading the calf.



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Make Silage of Barley

Because of the scarcity of feed for live stock in the old country, a great deal of thought has been given to substitutes. It is interesting to note that at the Hannah Institute Farm near Ayr, Scotland, barley is being grown for silage with apparently good results. Dr. Fowler, deputy director and animal husbandry expert, stated that as many as five cuts can be made from barley in one season and that the protein content was 21 percent.

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STRIPPINGS

by Gordon W. Geddes

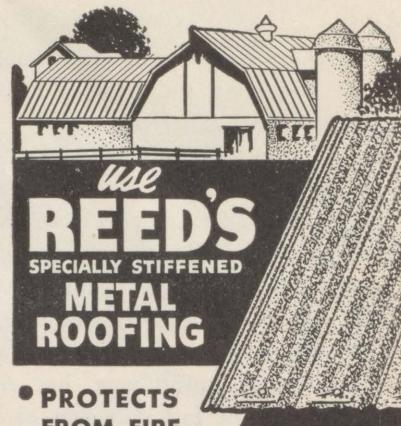
Well, Camp Macdonald has been put away in moth-balls for a while, at least I hope the many good wool blankets that were there are carefully preserved for next year. If it is as cold then as it was this year, they'll be needed. In fact they come in handy anyway. Since we weren't staying overnight, we didn't take any. However, they're pretty useful to sit on during speeches and discussion groups, especially if your personal upholstery is rather thin in strategic spots. Maybe, though, that rock I sat on during F. R. Scott's speech helped to complete the setup for education according to the definition for it evolved in the panel discussion. This was "something that makes people so uncomfortable in their present environment that they do something about it." I couldn't do much about it then but you can bet I'll take a blanket next year.

Somehow I can't quite agree with Mr. Scott's defense of the labour unions. He said that we must expect a comparatively young organization (about in the position of the British trade unions forty years ago) to be aggressive. Still, they could be that without being

short-sighted and selfish, as they must be to call a strike in wartime. It's like a fire brigade going on strike when their whole home town is threatened with destruction. We can't wait forty years for them to adopt the present more benevolent attitude of British unions. Besides, they have the chance to benefit by the mistakes of their predecessors which 'saves a lot of time' as one discussion group put it. That is one thing to hope for from the farmers' trade union, the Federation of Agriculture. It must be aggressive but if it follows in the footsteps of other organized groups to the extent of being wholly self-centered, a mere gimme group, it can do no permanent good. Some group must set the example of thinking in terms of the good of the nation instead of themselves. The Federation is the youngest so let them learn from the 'mouths of babes and sucklings'.

Speaking of the Federation, I was called upon to perform my appointed task of explaining its merits to the County Agricultural Society the other night. The strongest support for the idea of forming one here to connect us with the rest of the organization came from a manufacturer. Why? Because, as a member of the Canadian Manufacturer's Association, he at once realized how much good a similar setup could do the Canadian farmers. Anyway the Society decided to think on it and discuss it further later on.

It is a disappointment to see how few farmers know of the Federation. Some think it is too soon to start it here on that account. It was suggested that the Farm Forum might emphasize the Federation a little more this year. However, if there is truth in the statement made at the Camp by one in a position to know that 'too much of the printed material sent out to Forum groups last winter had a nice fresh look as if it hadn't been used', how can we learn that way? Somehow I still cling to the belief of learning by doing. I never studied hog rations much until I started feeding hogs. Responsibility gives a keener desire for knowledge.



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The other day we went to see the first combine to come to our district harvesting grain. It was purchased by L. S. Webster for his farm at Massawippi. It was handling a crop of O.A. C. 21 barley and of the barley mixed with Cartier oats. It was certainly doing a nice job, both of saving all the grain and cleaning the threshed grain. When a storm stopped operations, all cut grain was safely under cover. Of course the straw was out but that wouldn't hurt as much. When the rain was pouring down on our shocks, we wished the oats were inside. The grain wasted in our reaping alone is considerable though it sometimes lodges so we couldn't wait for it to ripen enough to combine. Still, we could swath it first. Anyway it will give local farmers a new topic now that the subject of shipping milk vs cream is becoming a bit stale.

Plowing has been done in England by electric power. At each end of the field, a heavy electric tractor was arranged to pull the plows back and forth across the field by means of a steel cable. The electricity used per acre was equal to the energy required by six flat irons used for ten hours.

(Continued from page 3)

people are reaching out for knowledge and are trying to solve their own problems by their own efforts. We have seen the co-operative movement making a considerable advance, not only in this country but in other parts of the world. We have seen a revival of activity within the trades union movement. I hope you will not be misled by to-day's newspaper headlines into believing that the growth of trades unions is an evil thing, because I do not believe we can ever have a healthy and progressive democracy without such a movement. That conflict should arise, and at this time, is unfortunate, but remember that we have seldom got the full statement of labour's case put before us. We have seen, amongst other signs of popular awakening, a development of farmers' organization in the Canadian Federation of Agriculture and other bodies. And we have also seen new parties come in the political field, like the C. C. F., Social Credit and the now extinct Reconstruction Party.

Our Own Responsibility

If we as a nation are going to steer our way through these economic difficulties successfully, and if we are going to make the best use of our opportunities, it will only be because we all wake up and become active in our own communities. We must each acquaint ourselves with the national problems and with the various proposals that are put forward for their solution. We must study the new movements within the country, and lend our support to those which we feel are progressive. We should specially study the official report of the Sirois Commission and understand what its recommendations mean for us. It is clear that here, as in the international field, public apathy will never produce government action.

I think the adult education movement can be of immense help to all of us in providing us with opportunities of studying these questions. What you decide to do must depend upon yourselves; the adult education movement does not try to force any proposals upon you. And I think that the war crisis makes it all the more necessary that every citizen should develop his social responsibility and his understanding of national problems, since the national war effort can never work smoothly or efficiently if there is conflict between different sections of the people.

But there is a much deeper issue underlying all these questions. I suppose the best description of it is to say that it is the issue of democracy. Like all really great things democracy cannot ever be defined. It is an ideal toward which we move and the understanding of which is constantly widening with new experience. Only a short while ago democracy meant little more than political freedom and personal freedom. Now we know that it means also economic freedom. The other day I heard someone define democracy in three words, as "liberty plus groceries". That is not a bad definition. But I think it leaves out an

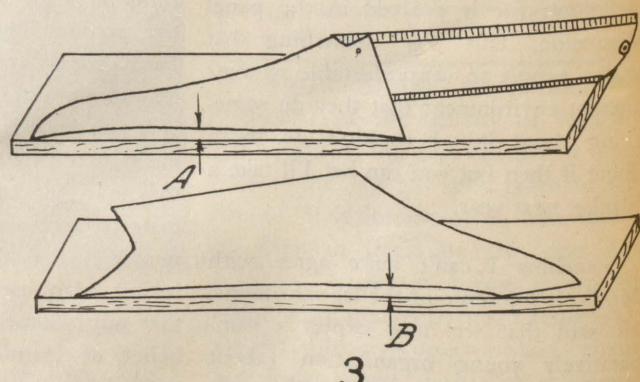
essential element. Democracy is a creative thing; it is a process of building a new and better way of living. Without this faith in its own power to create the future, democracy is dead and sterile. Other creeds to-day, which denounce democracy, have managed to produce a dynamic quality of their own. Democracy once had that same dynamic power, and it is discovering it again. Only that faith and that vitality can give us the strength to construct a democratic future out of this age of destruction.

In this process I see the adult education movement as one of the most useful democratic instruments. The ordinary educational system has its own duty to perform in teaching the on-coming generation how to live in a democratic world, but the principal decisions which affect us now will be made by adults. It was once thought when people had passed a certain period in their lives that they could learn little more, but we know now that that is not true. The ability to learn depends less upon age than upon a willingness and a curiosity which can be awakened to some degree in everyone. The great quality in adult education which appeals to me is that it possesses a belief in human beings of all ages, in their capacity to help themselves if they will come together to discuss common problems. People who have never experienced such work cannot understand this, but you who have been in touch with the adult education movement know that it is true. There is a vast untapped field of social energy in every community in Canada waiting to be released for constructive purposes. By utilizing that energy we can create a better Canada and make a profoundly useful democratic contribution alongside of our military contribution for the solution of world problems.

Sharpening Plow Shares

(Concluded from page 11)

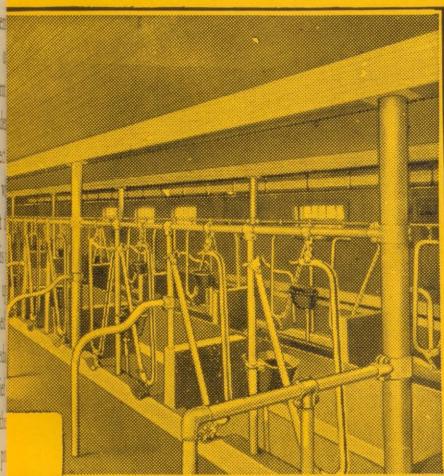
Crucible steel shares should not be made as hard as soft center steel shares because crucible shares become brittle when hardened too much.



3. TESTING THE SHAPE OF PLOW SHARE. "A" should be $\frac{1}{8}$ to $\frac{1}{4}$ of an inch. The throat clearance at "B" should be $\frac{1}{16}$ to $\frac{1}{8}$ of an inch depending on the size of the share.



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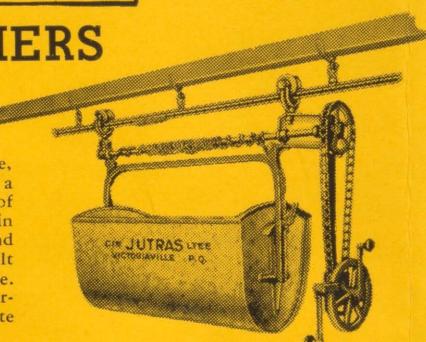
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